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Evaluating Baccalaureate Curriculum End-of-Life Care Content based upon End of Life Nursing Education Consortium (ELNEC) Guidelines

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by

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Dedication

This dissertation study is dedicated to my wonderful husband, children, parents, and family who have all encouraged and supported me in my doctoral studies.

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Evidence shows that the demand for palliative and end-of-life care is increasing in healthcare, yet nurses lack the proper education to provide this care with confidence and competence. Before educational practices are modified, a method is needed to assess current palliative and end-of-life care education. This dissertation study described a process for assessing a baccalaureate curriculum for its palliative and end-of-life care content integration, using an adapted theoretical framework, the Palliative Care Curriculum Evaluation Model. The End of Life Nursing Education Consortium (ELNEC) Core Curriculum was decomposed to identify all its key elements. Faculty members teaching in a baccalaureate nursing program were surveyed to identify strategies used and courses within which the ELNEC Core Curriculum content was taught. Survey responses from students enrolled in required nursing-specific courses within the curriculum at two time points within the semester were analyzed to assess changes in their knowledge of palliative and end-of-life care, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care. Findings revealed that clinical conference discussion/debriefing and lecture were the most frequently used strategies. The *Pain Management* and *Symptom Management* categories were most

covered, and *Final Hours* and *Introduction to Palliative Nursing* were least covered. There was an overall 95.3% match between the ELNEC Core Curriculum and the baccalaureate curriculum studied when all faculty member survey responses were analyzed, but this incorporated courses with much variability in content covered. There was a 78.45% match when only courses for which the content was covered consistently were analyzed. Baseline student outcomes demonstrated significantly higher results on knowledge and attitudes toward care of the dying measures ($p<.02$) for students further along in the curriculum as opposed to students toward the beginning of the program. The improvement in perceived competence across the semester for students was not significant, but did have a near-moderate effect size. The findings suggest that the methods used in the study were successful in assessing palliative and end-of-life care education. Implications of the findings for nursing practice, education, policy, and research are discussed.

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Chapter 1: Introduction

Many people in the United States receive palliative care nursing at or near the end of life because they wish to die a peaceful death. In 2011, one million individuals received palliative care in settings such as personal homes (41.6%), nursing homes (18.3%), hospice facilities (26.1%), and acute care settings (7.4%) (National Hospice and Palliative Care Organization, 2012). Between 2000 and 2009, palliative care service utilization by Medicare patients was on the rise (Teno et al., 2013). Patients receiving critical care within the month immediately preceding their death were also increasingly utilizing palliative care nursing services (Teno et al., 2013). Within nursing practice, palliative and end-of-life care services are requested and provided in a variety of healthcare settings, and baccalaureate nursing education programs must ensure that nursing students enter practice with the ability to provide that care.

Nursing research regarding how palliative and end-of-life care is currently taught, and the impact of the overall baccalaureate nursing curriculum on student knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care to patients, is lacking. Despite practicing in a system with increasing demand for palliative and end-of-life care services, nurses have reported feeling incompetent and experiencing anxiety when tasked with providing such care. In one study, more than 50% of nurses reported themselves as lacking competence in 21 of the 23 palliative care knowledge/skill categories (p. 173). Nurses who have completed end-of-life care continuing education have reported having significantly better

knowledge and attitudes toward care of the dying ($p < .001$) than nurses who did not (Schlairet, 2009).

Similar patterns of high anxiety and low knowledge and perceived competence have been reported in nursing students. Smith-Stoner, Hall-Lord, Hedelin, and Petzäll (2011) conducted a descriptive study comparing end-of-life attributes of nursing students in Norway, Sweden, and California. Comparatively, anxiety about death was higher in Californian students than Norwegian students, and Californian students received less palliative care education than both Norwegian and Swedish students. Nursing students have also been reported to benefit from receiving education on palliative and end-of-life care content. Such education resulted in beneficial psychological outcomes for nursing students, such as a shift from hesitancy and discomfort to feeling more capable of caring for dying patients (Allchin, 2006). The integration of standardized end-of-life content throughout the baccalaureate curriculum decreased student reports of anxiety in caring for dying patients (Barrere, Durkin, and LaCoursiere, 2008) and increased perceived competence. Thus, the literature supports that nursing students in the United States may be lacking adequate palliative and end-of-life care education in their baccalaureate programs. The literature also suggests that if students were to receive appropriate palliative and end-of-life care education, they may practice with better knowledge and greater confidence in providing care for patients at the end of life.

Yet, even though these studies demonstrate that education can positively impact students' psychological state, little is known about which curricular content and teaching

strategies most efficiently and effectively enhance student knowledge, attitudes, and perceived competence in providing palliative and end-of-life care. An integrative review of palliative and end-of-life care education in baccalaureate nursing programs found that studies regarding palliative care education focused solely on individual teaching strategies or specific course evaluations (Pfitzinger Lippe & Carter, 2015). Two different reviews of the literature support that any single educational approach focused on palliative and end-of-life care can decrease student anxiety and increase student knowledge and self-efficacy (Gillan, van der Riet, and Jeong, 2013; Pfitzinger Lippe & Carter, 2015); however, the relative effectiveness of each strategy remains unknown. Furthermore, no studies were identified that analyzed the overall nursing curriculum for breadth and depth of palliative and end-of-life care educational content (Pfitzinger Lippe & Carter, 2015). Nursing education research needs to progress to determine relative teaching strategy effectiveness, not only in improving student outcomes, but also in impact on patient and family outcomes. However, before specific teaching strategies can be evaluated, the overall curriculum must be assessed for areas of content gaps and redundancy to determine what palliative and end-of-life care educational needs exist.

A process for identifying these gaps and redundancies needs to be developed and utilized to guide educators to make informed, appropriate decisions about palliative and end-of-life care curricular revisions.

PURPOSE

The primary purpose of this exploratory descriptive study was to develop and test a new process of assessing palliative and end-of-life care content integration within a baccalaureate curriculum. The secondary purpose of this study was to assess changes and trends in outcomes of students participating in the program, specifically: knowledge of palliative and end-of-life care, attitudes toward death and toward care of the dying patient, and perceived competence in providing palliative and end-of-life care.

SIGNIFICANCE

The study was significant for the following two reasons: 1) the results add to the body of research about the use of End-of-Life Nursing Education Consortium (ELNEC) Core Curriculum in baccalaureate nursing programs; and 2) palliative and end-of-life issues need to be addressed to ensure nurses maximize the quality of care provided at a patient's end-of-life.

Researching ELNEC Core Curriculum

The widely accepted standard for end-of-life nursing education has been the ELNEC Core Curriculum, developed in 2001 by the American Association of Colleges of Nursing (AACN) in association with the City of Hope. ELNEC provides nation-wide training programs and courses to teach practicing nurses and educators regarding palliative and end-of-life care (AACN, 2015a). The current curriculum contains eight primary categories for palliative and end-of-life nursing, specifically: introduction to palliative care nursing; pain management; symptom management; ethical issues; cultural

considerations; communication; loss, grief, and bereavement; and final hours of life. The curriculum is updated annually to incorporate changes to evidence-based practice.

Despite the creation of the ELNEC core curriculum, adequate integration of palliative and end-of-life content into baccalaureate education is lacking. Wells and colleagues (2003) reported that only 3% of baccalaureate nursing programs had formal palliative and end-of-life courses. Research is needed that assesses ELNEC Core Curriculum content integration within baccalaureate programs, as well as any associated outcomes. Only then can educators determine how to best integrate the ELNEC Core Curriculum into baccalaureate nursing programs.

End-of-Life Issues

Over the last ten years, palliative and end-of-life issues have been increasingly emphasized within national health organizations (e.g. National Institutes of Nursing Research [NINR], Agency for Healthcare Research and Quality [AHRQ], and Robert Wood Johnson Foundation [RWJF]), with a focus placed on increased education for healthcare providers. In 2005, the National Institutes of Health (NIH) reported that end-of-life research was needed to address health systems issues related to education. The NIH made two recommendations: 1) increasing funding to translate end-of-life research findings into practice, and 2) enhancing continuity of care among providers to ensure patients receive high quality palliative and end-of-life care. Both of these issues may stem from a lack of adequate education of healthcare providers prior to entering practice.

The potential lack of pre-licensure training may in turn impact the quality and effectiveness of palliative and end-of-life care provided to patients in healthcare settings and at home, although literature has not been identified that directly links palliative and end-of-life care education to patient outcomes at the end of life. The NINR's Spotlight on End-of-Life Research (2012) found that many health providers were ill-prepared to appropriately discuss health care treatment options for patients with terminal conditions. Furthermore, the Innovations Exchange Team (2013), a group working within the Agency for Healthcare Research and Quality (AHRQ), reported that many healthcare provider lacked training on the basic elements and practices of applying palliative care to serious illness. The Innovations Exchange Team called for healthcare systems to provide training in order to enact change in patient outcomes. Each of these leading health organizations identified gaps in nursing education that may negatively impact patient care at the end of life if left unaddressed.

The identified gaps in preparation should be addressed through educational research and interventions to maximize student learning regarding palliative and end-of-life care prior to entering healthcare settings as independent practitioners. However, before any work can be done on enhancing educational systems, researchers and educators must first have a baseline understanding of the processes and outcomes of the current educational system. This dissertation study was a first step in addressing this gap by utilizing a theoretical model for curriculum evaluation to assess palliative and end-of-life care education provided to students in an existing baccalaureate nursing program.

RESEARCH AIMS AND QUESTIONS

Aim 1: Describe the overall implementation of palliative and end-of-life care education within an existing baccalaureate curriculum.

RQ 1.1: Where in the curriculum is palliative and end-of-life care education provided?

RQ 1.2: To what degree does the current palliative and end-of-life care curriculum content match the ELNEC Core Curriculum?

RQ 1.3: What methods are used to provide palliative and end-of-life care education?

Aim 2: Assess how students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care are associated with content taught within each specific semester of a baccalaureate program as measured by cohort.

RQ 2.1: What are the within cohort differences of students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care across the semester?

Aim 3: Assess trends in students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care across an entire baccalaureate nursing curriculum.

RQ 3.1: What are the between cohort differences of students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care?

THEORETICAL ORIENTATIONS

The methods for this study were guided by program evaluation theoretical principles. A decision-oriented theoretical approach was used for this study.

Decision-Oriented Approach

The decision-oriented approach uses established standards to objectively evaluate the merit and worth of an educational program, primarily through the use of behavioral objectives. The approach "emphasizes that program evaluation should be used proactively to help improve a program as well as retroactively to judge its merit and worth" (Stufflebeam, 2000a p. 62). According to Stufflebeam (2000a), issues regarding the merit and worth of a program are derived from expectations of key stakeholders. Utilization of the decision-oriented approach allows decision-makers to address these issues of merit and worth and then determine the appropriate next steps for the program.

Within nursing education, key stakeholders regulating curriculum content are accreditation agencies. The baccalaureate nursing curriculum under evaluation in this study was regulated by AACN standards and Texas Board of Nursing (BoN) requirements (Appendix A). The AACN standards are outlined within the *Essentials of Baccalaureate Education for Professional Nursing Practice* document (AACN, 2008). The Texas BoN requirements are outlined in the *Texas Board of Nursing Differentiated Essential Competencies of Graduates of Texas Nursing Programs* (Texas BoN, 2011). These requirements, which have been established by outside authorities, served as objectives that the program must have met in order to maintain accreditation. Failure to

include these objectives as criteria when assessing curriculum would have represented a critical oversight on the part of the researcher.

However, a major deficiency of each of the objectives from both agencies is that they lack specificity with which to be able to clearly determine when the objective has or has not been met. Based on this ambiguity, two programs (one that mentions the material briefly in a lecture and another that provides extensive coursework and clinical experiences on the subject) might both be determined to have met the objective. While necessary to consider, the AACN and Texas BoN objectives did not provide adequate guidance for a comprehensive evaluation of the baccalaureate curriculum; additional objectives were needed to guide the decision-orientated approach for this dissertation study.

The needed additional objectives were derived from ELNEC practice guidelines. Within their *Peaceful Death* project that immediately preceded the creation of ELNEC, the AACN and RWJF developed 15 palliative care nursing competencies and curricular guidelines (RWJF & AACN, 1998) that provide professional practice expectations for nurses who provide palliative and end-of-life care. Each of the eight primary categories of content within the ELNEC Core Curriculum have associated specific objectives. The ELNEC competencies and Core Curriculum objectives are provided in Appendix B. These competencies and objectives are more clearly stated and measurable than the ones offered by accreditation bodies. As such, the ELNEC competencies and objectives

provided more specific and clear guidelines by which to evaluate outcomes of the baccalaureate nursing program for this dissertation study.

CONCEPTUAL MODEL- CIPP EVALUATION MODEL

The conceptual model guiding this study was the Context, Input, Process, and Product (CIPP) Evaluation Model developed by Stufflebeam and colleagues (1971). The CIPP model aligns closely with the decision-oriented approach to program evaluations (Borich & Jemelka, 1982); therefore, the model was appropriate to use for this dissertation study. The CIPP evaluation model was used to help conceptually and operationally define variables. Appendix C provides a detailed description of the model by Stufflebeam (2000b).

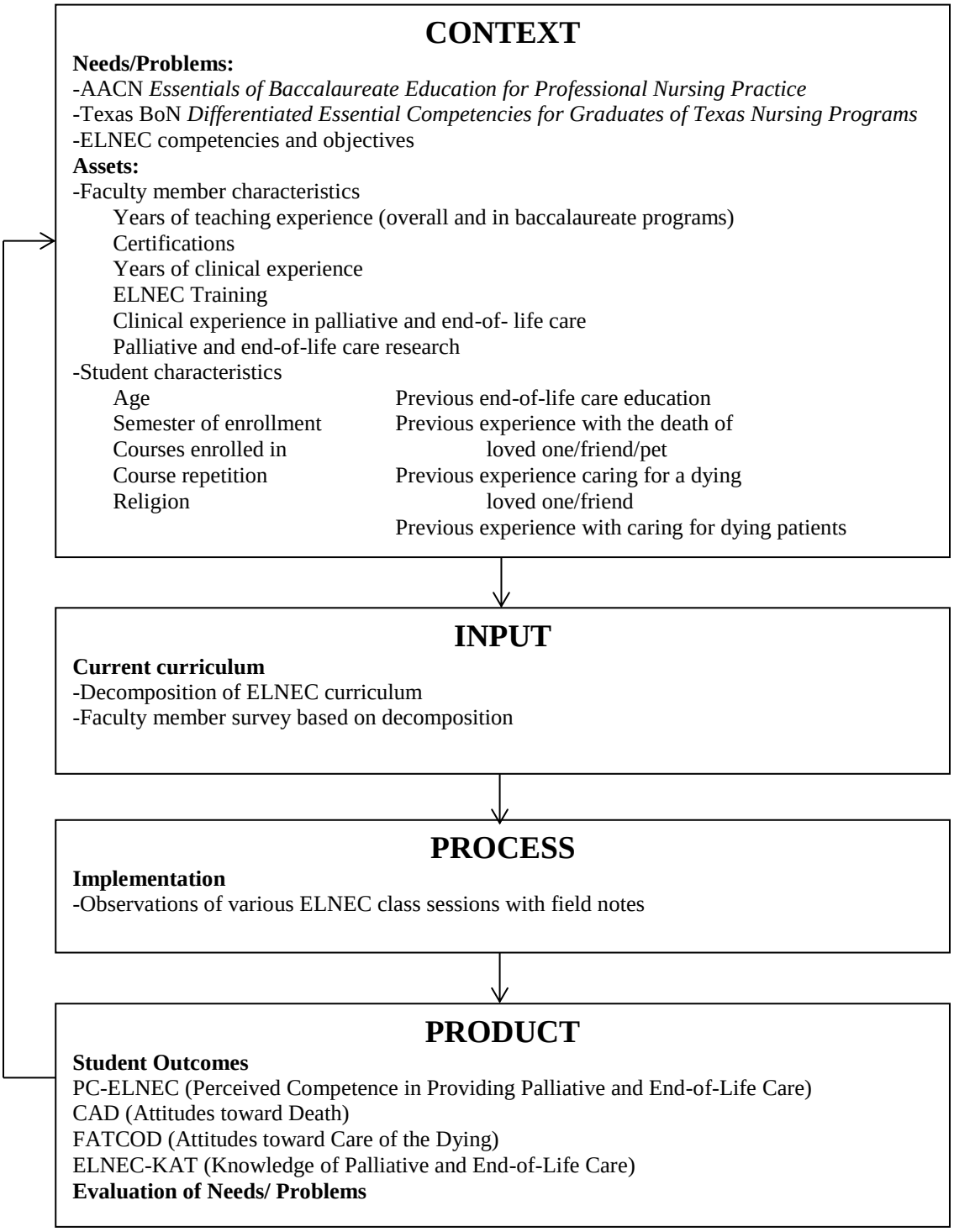
As previously mentioned, the primary purpose of this dissertation study is to develop and implement a process to assess a baccalaureate nursing program for ELNEC Core Curriculum content integration. In order to accomplish this purpose, select portions of the CIPP evaluation model were used to guide this research; the components of the model that were used have been identified with bold text within the figure in Appendix C. The adapted model used to guide this study is pictorially represented in Figure 1. *Context* was evaluated by an assessment of needs and problems (AACN *Essentials of Baccalaureate Education for Professional Nursing Practice*, Texas Board of Nursing *Differentiated Essential Competencies for Graduates of Texas Nursing Programs,* and ELNEC competencies and objectives) and assets (faculty member and student characteristics). The *faculty member characteristics* evaluated as part of assets were:

years of teaching experience (overall and in baccalaureate programs), years of clinical experience, clinical experience in palliative and end-of-life care, certifications, ELNEC training, and palliative and end-of-life care research. The *student characteristics* evaluated were: age, semester of enrollment, courses enrolled in, course repetition, religion, previous end-of-life care education, previous experience with the death of a loved one/friend/pet, previous experience caring for a dying loved one/friend/pet, and previous experience with caring for dying patients.

The ELNEC Core Curriculum was deconstructed to identify all its key elements. The resulting deconstruction provided the basis from which faculty members identified ELNEC content integration within their courses. The comparison of the ELNEC Core Curriculum and the faculty member responses served as *input* for this study. The *process* evaluation involved observation of class sessions in which ELNEC subject matter of interest was identified by the faculty as being taught.

Finally, the *product* evaluation entailed an assessment of outcomes for students. A primary component of the decision-oriented approach is the use of behavioral objectives to evaluate outcomes. Bloom's taxonomy of educational objectives (Bloom et al., 1956; Krathwohl, Bloom, & Masia, 1964) distinguishes between three primary domains of learning outcomes: cognitive, affective, and psychomotor. The selection of student outcomes measures for this study was guided by these three domains.

Figure 1. Palliative Care Curriculum Evaluation Model (Pfitzinger Lippe)



DEFINITIONS OF MAJOR CONCEPTS

Context Evaluation

Conceptual definition: "Assesses needs, problems, assets, and opportunities within a defined environment" (Stufflebeam, 2000b, p. 287).

Operational definition: Aggregation of needs, problems, and assets data representative of the baccalaureate nursing curriculum obtained from faculty member and student surveys at the beginning of the fall 2015 semester, AACN *Essentials of Baccalaureate Education for Professional Nursing Practice*, Texas Board of Nursing *Differentiated Essential Competencies for Graduates of Texas Nursing Programs*, and ELNEC competencies and objectives.

Needs

Conceptual definition: "Those things that are necessary or useful for fulfilling a defensible purpose" (Stufflebeam, 2000b, p. 287).

Operational definition: Objectives that are dedicated to palliative and end-of-life care content within each of the following documents: AACN *Essentials of Baccalaureate Education for Professional Nursing Practice* (Essential IX: Baccalaureate Generalist Nursing Practice, objective #6), Texas Board of Nursing *Differentiated Essential Competencies for Graduates of Texas Nursing Programs* (C.Knoweldge.4.a, C. Clinical Judgments and Behaviors.3.a., and F. Clinical Judgments and Behaviors.1.b.), and all ELNEC competencies and objectives.

Problems

Conceptual definition: "Impediments to overcome in meeting and continuing to meet targeted needs" (Stufflebeam, 2000b, p. 287).

Operational definition: The other objectives not dedicated to palliative and end-of-life care content within each of the following documents: AACN *Essentials of Baccalaureate Education for Professional Nursing Practice* and Texas Board of Nursing *Differentiated Essential Competencies for Graduates of Texas Nursing Programs*.

AACN essentials of baccalaureate education for professional nursing practice

Conceptual definition: "Outcomes expected of graduates of baccalaureate nursing programs" (AACN, 2008, p. 3) as specified by the AACN.

Operational definition: AACN objectives pertaining to palliative and end-of-life care content reported in the *Essentials of Baccalaureate Education for Professional Nursing Practice.*

Texas Board of Nursing differentiated essential competencies of graduates of Texas nursing programs

Conceptual definition: "Outcomes expected of graduates of baccalaureate nursing programs" (AACN, 2008, p. 3) in Texas as specified by the Texas Board of Nursing.

Operational definition: Objectives pertaining to palliative and end-of-life care reported in the *Texas Board of Nursing Differentiated Essential Competencies of Graduates of Texas Nursing Programs* document.

ELNEC competencies

Conceptual definition: End-of-life competency statements, developed by a group of health care ethicists and palliative care experts, which every baccalaureate nursing student should be able to perform prior to entering practice (AACN, 1998, para. 4).

Operational definition: 15 competencies defined within the *Peaceful Death: Recommended Competencies and Curricular Guidelines for End-of-Life Nursing Care.*

ELNEC objectives

Conceptual definition: Behavioral objectives which all individuals must be able to meet following completion of the ELNEC Core Curriculum.

Operational definition: All objectives reported in all eight ELNEC Core Curriculum modules.

Assets

Conceptual definition: "Accessible expertise and services- usually in the local area- that could be used to help fulfill the targeted purpose" (Stufflebeam, 2000b, p. 287).

Operational definition: Faculty member and student characteristics as defined below.

Faculty Member Characteristics

Teaching experience

Conceptual definition: The time, in years, a registered nurse has spent educating nursing students.

Operational definition: Number of semesters spent teaching nursing students in all types of programs and in baccalaureate nursing programs specifically as reported on the faculty member characteristic survey presented at the time of data collection.

Clinical experience

Conceptual definition: The time, in years, registered nurse has spent practicing in direct patient care encounters.

Operational definition: Number of years spent in direct patient care as reported on the faculty member characteristic survey presented at the time of data collection.

Clinical experience in palliative and end-of-life care

Conceptual definition: The frequency with which a registered nurse provides palliative and end-of-life care in clinical practice.

Operational definition: Faculty member frequency with which palliative and end-of-life care is provided in clinical practice (Daily, Weekly, Monthly, A few times per year, Never) reported on the characteristic survey presented at the time of data collection.

Certification

Conceptual definition: Official approval of a professional organization of a nurse's expertise in areas of practice, including palliative and hospice care.

Operational definition: Having obtained certification (Certified Hospice and Palliative Nurse, Certified Nurse Educator, Oncology Certified Nurse, Gerontological Nurse, None, Other (specify)) as reported on the faculty member characteristic survey presented at the time of data collection.

ELNEC training

Conceptual definition: Completion of the formal ELNEC Train-the-Trainer program which provides "nurses with education in palliative care preparing them to teach the information to practicing nurses and other healthcare professionals" (Hospice and Palliative Nurses Association, 2014).

Operational definition: Having completed the ELNEC Train-the-Trainer program as reported on the faculty member characteristic survey presented at the time of data collection.

Research focus

Conceptual definition: Area in which a faculty member focuses his/her research efforts.

Operational definition: Extent to which a faculty member's area of research is related to palliative and end-of-life care, if applicable (Not at all, Mildly, Moderately, Strongly, Exclusively, Do not conduct research), as reported on the characteristic survey presented at the time of data collection.

Student Characteristics

Age

Conceptual definition: The number of years that a person has lived.

Operational definition: Student report of age, in years, on the characteristic form presented at the time of data collection.

Semester of enrollment

Conceptual definition: The semester in the four-year nursing program in which the student is currently enrolled.

Operational definition: The semester (pre-nursing [PN], junior 1[J1], junior 2 [J2], senior 1 [S1], senior 2 [S2]) in which the student is currently enrolled as specified on the student characteristic form presented at the time of data collection.

Course repetition

Conceptual definition: Having to take a course an additional time after having been previously enrolled at least once.

Operational definition: Having to repeat a required nursing course as specified on the student characteristic form presented at the time of data collection.

Religion

*Conceptual definition: "*an organized system of beliefs, ceremonies, and rules used to worship a god or a group of gods" (Merriam-Webster Dictionary, 2015)

Operational definition: Identification as participating in practices of or being affiliated with a specific organized religion (Catholic, Protestant, Jewish, Muslim, Hindu, Atheist, None, Other (specify), Prefer not to Answer), as specified on the student characteristic form presented at the time of data collection.

Previous end-of-life care education

Conceptual definition: Having previously completed formal instruction in palliative and end-of-life content.

Operational definition: Indication of having completed previous instruction in palliative and end-of-life content (Full academic course dedicated to the subject, Learned content in other courses not dedicated to the subject, No previous education) as specified on the student characteristic form presented at the time of data collection.

Previous experience with the death of a loved one/friend/pet

Conceptual definition: Any prior interactions with a deceased individual who was considered a loved one, friend, or pet.

Operational definition: Indication of having had prior interactions with a deceased individual who was considered a loved one, friend, or pet (relationship reported by student), including years since death, as specified on the student characteristic form presented at the time of data collection.

Previous experience caring for a dying loved one/friend/pet

Conceptual definition: Provision of care for dying individuals (</= 6 months to live) for whom the student was a loved one, friend, or pet.

Operational definition: Indication of having cared for a dying loved one, friend, or pet cared (selection of care provider instead of observation), as reported on the student characteristic form presented at time of data collection.

Previous experience with caring for dying patients

Conceptual definition: Provision of care for dying individuals (</= 6 months to live) for whom the student was serving in a healthcare position.

Operational definition: Indication of having cared for dying individuals (observation versus active provider) while serving in a healthcare role (nurse aide/tech, volunteer, student nurse) as reported on the student characteristic form presented at time of data collection.

Input Evaluation

Conceptual definition: "Help[s] prescribe a program, project, or other intervention by which to improve services to intended beneficiaries" (Stufflebeam, 2000b, p. 291).

Operational definition: Decomposition of ELNEC core curriculum with subsequent comparison to current curricular practices in the target baccalaureate nursing program.

ELNEC curriculum

Conceptual definition: A core curriculum created and continuously updated by experts to address weaknesses in palliative care nursing practice and ensure nurses are able, through education, to meet the ELNEC recommendations of the *Peaceful Death* document.

Operational definition: All critical elements of the ELNEC Core Curriculum as determined by a decomposition of the core curriculum available for purchase.

Process Evaluation

Conceptual definition: "An ongoing check on a plan's implementation plus documentation of the process, including changes in the plan as well as key omissions and/or poor execution of certain procedures" (Stufflebeam, 2000b, p. 294)

Operational definition: Identification of topics from the ELNEC core curriculum taught within the baccalaureate nursing program being evaluated, including in which courses the

content was taught and teaching strategies used to teach the content, as indicated by faculty member survey response in the decomposition questionnaire and assessment of the implementation via in-class observations by PI.

Product Evaluation

Conceptual definition: "Measur[ing], interpret[ing], and judging an enterprise's achievements. Its main goal is to ascertain the extent to which the evaluand met the needs of all the rightful beneficiaries" (Stufflebeam, 2000b, p. 297)

Operational definition: Assessment student outcomes for students across all semesters of the baccalaureate nursing program being evaluated as described below.

Perceived competence in providing palliative and end-of-life care

Conceptual definition: "a cognitive construct that refers to nurses' judgment of their capabilities to provide quality care to patients and family experiencing a life-limiting illness or at end of life" (Desbiens and Fillion, 2011, p. 230).

Operational definition: Significant improvement in student scores, $p<.05$, across three measurement time points on the Perceived Competence in Meeting ELNEC Standards (PC-ELNEC) instrument (Pfitzinger Lippe & Becker, 2015).

Attitudes towards death

Conceptual definition: Overall perceptions of death, including anxiety and fear about death itself.

Operational definition: Significant decrease in student scores, $p<.05$, on the Concerns about Dying scale.

Attitudes towards care of the dying

Conceptual definition: Student anxiety regarding caring for individuals in the final six months of life.

Operational definition: Significant increase in student scores, $p<.05$, on the Frommelt Attitudes Toward Care of the Dying scale across two measurement time points.

Knowledge of palliative and end-of-life care

Conceptual definition: Having retained sufficient information of all key aspects of palliative and end-of-life care.

Operational definition: Correct responses on 40/50 items on the ELNEC Knowledge Assessment Test (ELNEC-KAT) at the third measurement time point, as well as significant improvement, $p <.05$, across three measurement time points.

ASSUMPTIONS

Based on the current literature and the conceptual framework being utilized, the assumptions for this dissertation study included the following:

1. There has been some attempt to integrate palliative care and end-of-life content into the baccalaureate nursing curriculum being evaluated.
2. The ELNEC Core Curriculum is the gold standard for the palliative and end-of-life care content that should be taught to baccalaureate nursing students.
3. The CIPP Evaluation Model provides a framework by which palliative and end-of-life care education can be accurately assessed.

4. Both the AACN and Texas Board of Nursing objectives contain palliative and end-of-life care expectations within at least one competency.
5. Faculty members teaching the in baccalaureate nursing program being evaluated think education about palliative and end-of-life care is important.
6. Students and faculty members will respond to surveys accurately and honestly.
7. Different strategies used to teach palliative and end-of-life care content may influence outcomes differently.
8. Individual student characteristics may influence outcomes and student perceptions of palliative and end-of-life care content.
9. Faculty member characteristics may impact how palliative and end-of-life care content is taught in their courses.

LIMITATIONS

The possible limitations of this dissertation study included the following:

1. This was the first time the decomposition of the ELNEC curriculum was used to evaluate palliative and end-of-life care content in a baccalaureate nursing program. Thus, the faculty member survey instrument developed from this decomposition did not yet have established validity and reliability.
2. All cohorts of students were assessed during one semester. Variations in faculty members, teaching strategies, and clinical experiences for each cohort's progression through the program were not able to be assessed or controlled.

3. This dissertation study focused on only one baccalaureate nursing curriculum; therefore, the results cannot generalize to other nursing programs or curricula.
4. Student outcomes for this dissertation study focused on perceived competence as opposed to actual competence; therefore, judgments about actual nursing practice abilities are unable to be made.

SUMMARY

This chapter discussed the background and significance that palliative and end-of-life care education has within baccalaureate nursing education. The primary purpose of this study was to design and test a new process for assessing a curriculum to describe how palliative and end-of-life care nursing was currently being taught within the baccalaureate nursing curriculum being evaluated. A secondary purpose was to assess student palliative and end-of-life care learning outcomes in the program. This study specifically assessed aspects of *context, input, process,* and *product* of the CIPP Evaluation Model, using a decision-oriented approach to program evaluation to guide the study. A Palliative Care Curriculum Evaluation Model was adapted from the CIPP model (Stufflebeam et al., 1971) and was used as a conceptual framework for this study (Figure 1). Additionally, this chapter provided the conceptual and operational definitions of the concepts that were examined in this study. This dissertation study informed an overall program of work investigating palliative care education in baccalaureate curricula to enhance future education and, by extension, patient and family outcomes at the end-of-life.

Chapter 2: Review of the Literature

The focus of this dissertation study was to assess palliative and end-of-life care content within a baccalaureate nursing program using an adapted Context, Input, Process, Product (CIPP) Evaluation Model. This chapter presents a synthesis and critique of the literature related to the relationships between constructs that are central to the focus of this study. This chapter begins with a discussion of literature regarding the use of the CIPP Evaluation Model for assessing or evaluating nursing education, specifically related to palliative and end-of-life care when possible. This discussion is followed by research on selected aspects of context, input, process, and product as they relate to palliative and end-of-life care education, or, when literature specific to this area is absent, as they relate to undergraduate nursing education in general (baccalaureate and associate degree programs).

Within the concept of *context*, empirical literature about needs, problems, and assets identified within this study are discussed as they impact curriculum development, particularly palliative and end-of-life care curriculum when possible. The concepts of *needs* and *problems* are addressed by discussing the empirical literature on American Association of Colleges of Nursing (AACN) *Essentials of Baccalaureate Education for Professional Nursing Practice*, Texas Board of Nursing (BoN) *Differentiated Essential Competencies for Graduates of Texas Nursing Programs(DECs)*, and End-of-Life Nursing Education Consortium (ELNEC) competencies and core curriculum objectives.

The concept of *assets* included faculty member and student characteristics. Empirical literature exploring faculty member characteristics will be discussed. Similarly, empirical literature exploring student characteristics will be discussed. Next, the empirical literature exploring the concept of *inputs*, specifically the ELNEC core curriculum components, is discussed as well as how this content may impact curriculum implementation.

The empirical literature exploring the concept of *process* will then be discussed, namely current curricular practices on palliative and end-of-life care education within baccalaureate and associate degree nursing programs. Finally, empirical literature exploring the concept of *products* will be discussed. Specifically, literature addressing *perceived competence in providing palliative and end-of-life care, attitudes toward death, attitudes toward care of the dying,* and *knowledge of palliative and end-of-life care* for baccalaureate nursing students will be discussed.

CIPP EVALUATION MODEL

The Context, Input, Process, Product Evaluation Model was originally developed by Stufflebeam and colleagues in 1971. The CIPP Evaluation Model is grounded in the decision-oriented theoretical approach (Borich & Jemelka, 1982), which is the same approach used to guide this dissertation study. Due to the shared theoretical perspective, the CIPP Evaluation Model was appropriate to use in this dissertation study. The model and related literature will be discussed next. Stakeholders and implementers, as they pertain to the CIPP Evaluation Model, will be discussed. For the purposes of this

discussion, stakeholders are individuals who have a vested interest in the program and its outcomes. Implementers are those individuals who perform activities as part of conducting the program.

First, the CIPP Evaluation Model will be described, as presented by various works of Stufflebeam and colleagues. Second, empirical literature utilizing the entire CIPP Evaluation Model will be discussed to demonstrate the model's utility in conducting research in healthcare and healthcare education. Finally, empirical literature utilizing one or more steps, rather than the entire CIPP Evaluation Model, will be discussed to provide additional examples of the model's use in research.

Overview of the CIPP Evaluation Model

The CIPP Evaluation Model is comprised of four main steps: *context, input, process,* and *product.* Data obtained from all four steps are used collectively to conduct an evaluation to judge a program's merit and worth. According to Stufflebeam (2003), evaluation is:

> The process of delineating, obtaining, providing, and applying descriptive and judgmental information about the merit and worth of some object's goals, designs, implementation, and outcomes to guide improvement decisions, provide accountability reports, inform institutionalization/dissemination decisions, and improve understanding of the involved phenomena. (p. 34)

The CIPP Evaluation Model can be used for various purposes, with multiple sources of information obtained based upon the given purpose of the evaluation.

However, regardless of the sources of information or purpose of the evaluation, the data obtained should be reliable and credible such that different evaluators would be expected to arrive at similar results.

Furthermore, the CIPP Evaluation Model can be used with one of two main orientations: improvement/formative or accountability/summative. Within the improvement/formative orientation, key stakeholders intend to develop a new program or make improvements to an existing program, and evaluations will be conducted at the completion of program implementation. In contrast, if stakeholders choose to evaluate a program to verify that the program is being implemented according to plan, an accountability/summative orientation would be selected. Evaluations with an accountability/summative orientation will be conducted during program implementation. The selection of one of the orientations depends upon the rationale key stakeholders have for evaluating a given program. Furthermore, the strategies used within each stage of the CIPP Evaluation Model are guided by the orientation selected. This dissertation study used the accountability/summative orientation and conducted an ongoing assessment during program implementation.

All steps of the CIPP Evaluation Model are guided by an organization's core values, but each component within the model has an additional evaluation focus, as depicted in Figure 1. There is a bi-directional relationship between core values and the focus of the given evaluation. Another bi-directional relationship exists between the focus of the given evaluation and the type of evaluation selected. Furthermore, the CIPP

Evaluation Model is a cyclical process, such that a context evaluation influences the input evaluation, which in turn effects the process evaluation. The process evaluation influences the product evaluation, which goes on to impact the context evaluation the next time an evaluation is initiated. Next, each component of the model will be described.

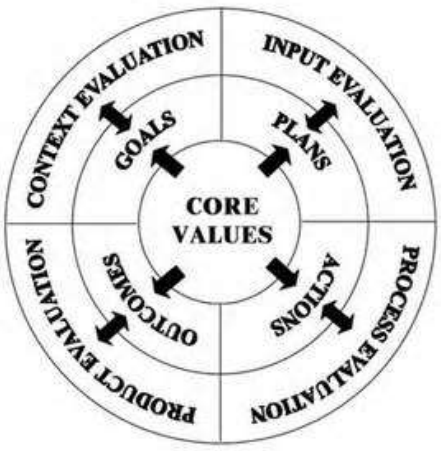


Illustration 1. Key Components of the CIPP Evaluation Model and Associated Relationships with Programs (Stufflebeam, 2003, p. 33)

Context

The first part of the CIPP Evaluation Model is *context* evaluation. Within context evaluation, *needs, problems, assets,* and *opportunities* of a given program are assessed. According to Stufflebeam (2003), context evaluations allow the needs of key stakeholders to be defined for later assessment. From these needs, goals are created. The goals need to be defensible, prioritized, and sound. Context evaluations can be conducted at any point along the program's implementation (prior to initiation, during implementation, or at the conclusion). The timing of the context evaluation should be

determined by the orientation that was selected for the evaluation (improvement/formative or accountability/summative).

The methods used to collect *context* evaluation data is based on the purpose(s) for conducting the evaluation (e.g. shared vision, funding for changes to the program, create objectives for staff development, or begin improvement projects). Stufflebeam (2000; 2003) suggests a number of commonly used data collection methods. Some of these methods include: diagnostic checklists, the Delphi technique, expert panel site visits, advisory panels, hearings, and town meetings. The results are communicated to stakeholders once the context evaluation has been completed. Following the completion of the context data collection and evaluation, the *input* evaluation is conducted.

Input

The second step of the CIPP Evaluation Model is *input* evaluation. Input evaluations most commonly focus on comparing different methods of implementing a new program or exploring changes to an existing program. Elements that are considered in this evaluation may include: budget, work plans, political barriers, legal restraints, and resource availability (Stufflebeam, 2003). Input evaluations can also be conducted by reviewing best practice standards and extant literature. Exemplar programs may be visited, experts or regulation agencies consulted, or consumer reports evaluated. These latter approaches are more commonly used when a new program is being proposed.

Through discussions with stakeholders, the *input* evaluation information should be prioritized and analyzed to determine how decisions for the program will be made. For

example, if school administrators were considering purchasing new textbooks for a science program, the available books from different publishers would be analyzed. The information obtained from the input evaluation would then allow the administrators to make a final decision regarding which textbook would be purchased. Options for improving an established program or creating a new program can be considered and selected during these input evaluation discussions. Once the final decision is made from the data collected in the input evaluation, a work plan is created to guide implementation of selected changes. Then the *process* evaluation step of the CIPP Evaluation Model is initiated.

Process

The third step of the CIPP Evaluation Model is *process* evaluation. Process evaluations focus on the implementation of the program to verify the work plan is being followed as expected. Within process evaluations, the way in which the program was implemented is assessed through detailed monitoring, documentation, and ongoing assessment of each piece of the work plan. The process evaluation holds those implementing the program accountable to the work plan developed/identified in the input evaluation, and allows for improvements or corrections to be made during program implementation, if deemed necessary by stakeholders. In ensuring the identified work plan from the input evaluation is followed, costs are monitored, activities performed within the program are assessed, and implementers are observed to ensure they are

accurately completing their responsibilities. Feedback and documentation are provided to stakeholders throughout the process as necessary.

According to Stufflebeam (2003), "the linchpin of a sound process evaluation is the process evaluator" (p. 47). The process evaluator may be a member of the staff or an outside party. The role of the process evaluator is to obtain the data, monitor the program implementation, document, and provide feedback to stakeholders. It is important that the process evaluator utilize systematic approaches to data collection that are grounded in a deep understanding of the program they are evaluating. For example, data collection content, methods, and timing must fit with program evaluation goals.

Process evaluations provide feedback to program implementers to correct and improve the program and verify accountability to the work plan. Not only do process evaluations benefit the individuals conducting the program by ensuring quality and fidelity to the work plan, but key stakeholders also benefit from receiving information to aid them in ongoing program decision making. Once the process evaluation is complete, the product evaluation is conducted. According to Stufflebeam (2003), the *product* evaluation, discussed next, cannot occur without information from the process evaluation. Therefore, the process evaluation must provide ample, reliable evidence so that a proper product evaluation can be conducted.

Product

The fourth step of the CIPP Evaluation Model is *product* evaluation. The product evaluation assesses all program outcomes, including short- and long-term as well as

intended and unintended outcomes (Stufflebeam, 2003, p. 32). The selection of outcomes to evaluate is guided by stakeholder's needs, and the product evaluation ensures these needs are kept in focus, are successfully achieved, and that any unintended effects from implementing the program are identified. Since stakeholders' needs are the focus of the product evaluation, the information provided will be interpreted through each stakeholder's unique lens. Process evaluators must ensure each stakeholder receives product evaluation information that addresses each individual's unique area of interest/concern.

Many different methods can be utilized to obtain data for *product* evaluations. The method is selected based on the type of information that is sought. For example, student test scores from criterion-referenced tests, objective tests, or performance assessments may be used to generate data regarding knowledge of content or competence with skills within the program. Similarly, participant interviews, group hearings, or case studies may be used to generate data regarding perceptions of the program.

One unique method for conducting a *product* evaluation, when stakeholders want an unbiased evaluation of the outcomes of the program, is to utilize a goal-free evaluator to assess the outcomes of the program. Using evaluators who do not have prior knowledge of the program goals may prevent personal bias during data collection. The goal-free evaluator's data would later be compared to program goals by the stakeholders to determine program merit or worth.

Product evaluations can occur during program implementation, at the program's completion, or at some designated time after the program completion. The results of the product evaluation are used by stakeholders to decide whether or not the program should be continued, or what, if any, changes need to be made before the next program implementation. Furthermore, the information stakeholders receive from the product evaluation goes on to inform the *context* evaluation for the program's next implementation.

With this understanding of the CIPP Evaluation Model, literature exploring its utilization will be presented and discussed to provide support for how the model is being used in healthcare and healthcare education research.

UTILIZATION OF THE CIPP EVALUATION MODEL IN EXTANT LITERATURE

The CIPP Evaluation Model is an evaluation model that has been extensively reviewed in the empirical literature. Only studies reporting the utilization of the CIPP Evaluation Model within healthcare settings or healthcare education will be explored in this review since they most closely relate to the focus of this dissertation study (assessing a baccalaureate nursing education program for implementation of palliative and end-of-life care content).

The extant literature uses the CIPP Evaluation Model in one of two ways: 1) use of the full CIPP Evaluation Model; or 2) use of only one or a few steps of the model. First, literature in which the entire CIPP Evaluation Model was used will be discussed.

Second, literature in which a portion of the CIPP Evaluation Model was described will be discussed.

Full CIPP Model Studies

Ten studies were identified that utilized the full CIPP Evaluation Model to guide research within healthcare and healthcare education literature. Of these identified studies, two were conducted by large national organizations that conducted assessments of national initiatives, and, as such, collected large amounts of data for each stage of the CIPP Model. The other identified studies used the full CIPP Model, but were working with much smaller data sets. Due to the difference in size and scale of the national studies and the remaining studies, the articles for the two national studies will be discussed separately from the smaller scale studies.

Large-scale studies

Healthcare organizations and agencies have utilized the CIPP Evaluation Model to evaluate large, national programs in two identified studies. Farley and Battles (2009) described a four-year evaluation conducted by the Agency of Healthcare Research and Quality on their patient safety initiative operations. During the first year of the evaluation, a *context* evaluation was conducted to obtain initial assessment of the context of the program. During the same time, an *input* evaluation assessed goals and strategies for the program. During years two through four, information about changes to context or goals and strategies was collected. The context evaluation identified five national needs regarding patient safety. Additionally, the ongoing input evaluations allowed AHRQ to

tailor priorities regarding initiatives/studies for funding and emphasis during each of the study years.

Process evaluation began during the first year, at which time baseline patient safety activities and contributions of the program to patient safety knowledge and practices were documented. The process evaluation during the second and third years focused on gathering information about contributions of the program to patient safety knowledge and practices in healthcare, other mechanisms to strengthen safety practices, dissemination of new knowledge to stakeholders, and progress in adoption of effective safety practices. Within the article, Farley and Battles (2009) depicted a detailed framework developed to guide the process evaluation. The framework included such components as monitoring progress and maintaining vigilance, knowledge development, and practice implementation.

Farley and Battles (2009) explained that *product* evaluations were conducted with various areas of emphasis during the second, third, and fourth years of evaluation. In the second year, initial identification of potential outcomes measures and data sources was conducted. In the third and fourth years, development of data sources, establishment of AHRQ infrastructure to continue and expand monitoring and documentation of baseline trends was conducted. Additionally, in the fourth year, assessment of the impact of the program was conducted.

In this study evaluating AHRQ patient safety initiatives, Farley and Battles (2009) provided a clear and detailed description of how the CIPP Evaluation Model could be

used to conduct a multi-year evaluation of a large, national program. The authors provided detail regarding the goals, timing, and methods to gather data for each step of the CIPP Evaluation Model. In another study by Kahn and colleagues (2014) the CIPP Evaluation Model was used to evaluate a national healthcare organization's program to reduce healthcare-associated infections (HAI).

For their evaluation, Kahn and colleagues (2014) obtained *context* evaluation data about policies, needs, resources, and challenges regarding HAI reduction within the organization. A steering committee used the context data to create goals for HAI reduction. *Input* evaluation data about how decisions were made regarding resources, infrastructure, expertise needed to support the goal, and activity selection was collected and used to create a work plan. *Process* evaluation data focused on how selected activities in the work plan were implemented. *Product* evaluation data focused on outcomes of the work plan activities, specifically reduction and prevention of HAI. Kahn and colleagues used their understanding of the CIPP Evaluation Model to create an HAI-tailored framework to help facilitate understanding of the obtained evaluation data. The resulting framework continued to be utilized after the evaluation period to guide program modification and implementation.

Kahn and colleagues (2014) identified four strengths to using the CIPP Evaluation Model to conduct a program evaluation. First, the CIPP Evaluation Model was broad enough to capture all aspects of a complex program. Second, the model allowed for ongoing, longitudinal data collection and program refinement. Third, using the model to

conduct ongoing evaluations provided constant feedback that could be used to guide program decision-making. Finally, the model ensured all key stakeholders, from patients and caregivers to policymakers were included throughout the evaluation process.

Kahn and colleagues (2014) also reported three weaknesses of using the CIPP Evaluation Model to conduct a program evaluation. First, the time and resources needed to collect and analyze all pertinent information for such a large national project was substantial. Second, the lack of a definition of quality within the CIPP Evaluation Model risks creating difficulty by hindering clear determination of the merit or worth of the program based on evaluation data. Therefore, it was suggested that evaluators for each program work with stakeholders to clearly define what "good" and "bad" looks like for a given program. Finally, the model did not have formal mechanisms to evaluate a program's cost-effectiveness, achievements, or limitations, especially for evaluating a large, multi-pronged program.

The two previous studies demonstrated how the CIPP Evaluation Model could be used to guide evaluations of large, complex programs. The next studies demonstrate how the CIPP Evaluation Model can be used to evaluate smaller programs.

Small-scale studies

The CIPP Evaluation Model was used to guide program evaluations for ten small-scale studies. Al-Khathami (2012) used the CIPP Evaluation Model to assess a postgraduate family medicine residency program for healthcare physicians with a bachelor's medical degree (n=31) in Saudi Arabia. The author conducted a cross-

sectional study in which trainee assessments of aspects of *context, input, process,* and *product* of the program were analyzed. The survey comprised 31 quantitative questions on a 5-point Likert scale and 9 qualitative, open-ended questions. The author did not explain how questions were developed, but indicated that the following information was assessed for each stage of the CIPP Evaluation Model.

Context evaluation questions focused on achievement of program goals and barriers to the achievement of goals, objectives, and needs. *Input* evaluation questions assessed trainee opinions of the various components of the program via open-ended questions. *Process* evaluation questions focused on perceptions of trainers, theoretical sessions, and clinical sessions. The *product* evaluation questions comprised quantitative and qualitative assessments of program participants' overall impression, enjoyment of, and satisfaction with the program and with the various assessment tools used in the program.

The study by Al-Khathami (2012) provided an example of how the CIPP Evaluation Model can be used to conduct all four component evaluations at the completion of a program, which can then guide future modifications and implementations of the program. Unlike the study by Al-Khathami, the remaining identified studies use the CIPP Evaluation Model for evaluations conducted during program implementation.

Petro-Nustas (1996) used the CIPP Evaluation Model to guide a partial evaluation of a quality improvement program in a hospital's nursing department. According to the author, the study was a partial program evaluation, as not all stakeholders or data points

were included within the evaluation; data was only obtained from interviews with nursing administration and department managers of the hospital (n=24). Research questions for the study were identified within each of the steps of the CIPP Evaluation Model.

In the study by Petro-Nustas (1996), a needs assessment was conducted as part of the *context* evaluation, resulting in two sets of identified needs: one at the departmental level and another at the organizational level. The *input* evaluation involved having nursing directors serve as change agents to select from suggested work plans to address the identified needs on each unit, which would be implemented during the *process* evaluation stage. Finally, the *product* evaluation in this study was reported as an ongoing process, but specific outcomes were not provided. The author asserted that the product evaluations tended to uncover new problems to be solved, therefore highlighting the cyclical nature of the CIPP Evaluation Model. Despite the lack of description regarding product evaluation data, the CIPP Evaluation Model was useful in framing and guiding this study in the evaluation of a quality improvement program. Additional studies provide support for the use of the CIPP Evaluation Model to evaluate quality improvement projects in healthcare and healthcare education settings.

Daniels and Khanyile (2012) demonstrated how the CIPP Evaluation Model could be used to change practice in nursing education. The authors used the full model to guide their evaluation of a five-year collaboration between three nursing schools in Western Cape, South Africa. Qualitative data for the evaluation was obtained via semi-structured interviews of students at any stage of the four year program (n=81), deputy vice-

chancellors (n=3), deans (n=3), department heads (n=3), and instructors (n=18). Interview questions were framed around the CIPP Evaluation Model. From themes identified using content analysis, a framework for effective collaboration was developed and structured around the four steps of the CIPP Evaluation Model. The framework was designed to guide future collaborative efforts in an attempt to reduce issues and tensions identified in the semi-structured interviews.

Although Daniels and Khanyile (2012) cited that the CIPP Evaluation Model was used to guide their study, evidence to support this claim was not provided within the article. The CIPP Evaluation Model was more prominently represented within the collaboration framework developed to guide future collaborations, especially as each steps of the model had a correlating component in the proposed framework.

In a different study, Singh (2004) took use of the CIPP Evaluation Model one step further as she presented a framework for conducting a full evaluation of collaborative nursing education programs, instead of just one aspect of collaboration. Singh proposed a strategy for conducting an evaluation of a collaborative nursing program in Ontario, Canada. The author first presented an accurate, detailed explanation of the CIPP Evaluation Model. Next, the author identified key factors for successful use of the CIPP Evaluation Model to evaluate the program, including: 1) creation of a matrix detailing the main questions and sub-questions with their associated indicators, sources of data, and methods of data collection; 2) creation of a work group or committee of all stakeholders who would direct and interpret results of the evaluation; 3) selection of either an internal

or external program evaluator to conduct the evaluation; 4) ensuring the evaluators "understand and adhere to the program evaluation standards of utility, feasibility, propriety, and accuracy" (Singh, 2004, p. 2); and 5) obtaining data from multiple sources and using different strategies to ensure the detail and complexity of the program is fully captured. Following these guidelines and blueprint, the author reported an evaluation of the collaborative program was able to be conducted (data not provided).

Another article by Sancar Tokmak, Meltem, and Fadde (2013) utilized the CIPP Evaluation Model to evaluate a single course within a nursing program. Sancar Tokmak and colleagues used a mixed methods descriptive design in their evaluation of one of 12 courses within an online master's nursing program. Data was obtained from nursing students enrolled in the course using a CIPP survey (n=38), focus groups (n=10), and an open-ended questionnaire (n=16). The *context* evaluation was conducted using the CIPP survey to obtain needs assessment information. The results of the survey allowed decision-makers to identify the course to be improved as well as which specific components of the course needed revision. Next, the *input* evaluation was conducted in which students in a focus group discussed proposed changes to the course. Other students enrolled in a graduate level e-learning course were interviewed for additional solutions to improve the course. Information from both groups was used by the managers of the online master's program to determine the work plan for improving the course. In the *process* evaluation, the work plan for improvements was implemented.

The *product* evaluation was conducted two months after the start of the course. Students were presented both the old and revised versions of the course and were told the changes being made. The students were asked to evaluate which version they preferred. Additionally, students completed a survey at the end of the course to evaluate how the modifications impacted their participation and performance in the course as well as their perceptions of the usefulness of the course modifications. Student responses also provided suggestions for additional modifications and encouragement to similarly revise the other 11 courses in the program.

In the study by Sancar and colleagues, the CIPP Evaluation Model provided a useful framework by which to evaluate and modify an online graduate-level nursing course. Similarly, Steinert, Cruess, Cruess, and Snell (2005) used the CIPP Evaluation Model to conduct an evaluation of a faculty development program about professionalism for medical school faculty members (n=152). For both the *context* and *input* evaluations, Steinert and colleagues reported existing data was available to make decisions to quickly advance to the next step. The authors used pre-existing information as data for the *context* evaluation, although this information was not described in detail within the article. The reported *input* evaluation data was a functioning faculty development office, local expertise in professionalism, and influential participants. The authors determined the use of think tanks and workshops was the best work plan for conducting the faculty development program.

Unlike for the context and input evaluations, Steinert and colleagues (2005) obtained new data for the *process* and *product* evaluations. For the process evaluation, faculty members participating in the program completed surveys about their perceptions of the format, usefulness, and benefit of the faculty development workshop. Finally, the product evaluation was conducted by assessing professionalism activities integrated within medical school education and by having faculty members reflect on their use of the program content 18 months after the workshop. This study provided an example of how the CIPP Evaluation Model can be used to evaluate a healthcare education program for faculty members.

A different study by Zhang and colleagues (2011), describing the utilization of the CIPP Evaluation Model in non-healthcare education research ,warrants mention due to its high quality fidelity to the model. Zhang and colleagues first provided an in-depth description of the CIPP Evaluation Model and explained how their understanding of the model guided their program evaluation of a service-learning project for undergraduate education students. In the service-learning project, education students worked with elementary students to improve their reading skills. To conduct the overall evaluation, a task force of undergraduate faculty members served as the program evaluators.

Within the *context* evaluation, the needs for the following four stakeholder groups were assessed by the evaluators: the university, the local school system, undergraduate students, and elementary students. The program evaluators, being university faculty members, were able to use their expert knowledge of the university system to determine

needs. Within the local school system, needs were assessed by interviews with elementary school teachers. Education student readiness to engage in the service-learning activity was assessed through five focus groups as well as the completion of four surveys. Finally, the needs of elementary students receiving the program were assessed using four literacy tests.

For the *input* evaluation, the best options for service-learning projects were identified and selected for the work plan through meetings conducted with faculty members, reading specialists in the elementary school, and elementary teachers. Furthermore, a detailed review of the literature on best practices for literacy training in elementary students who are at-risk readers was used as additional data for the input evaluation. Using all of the data obtained, the faculty task force made decisions for the work plan. Finally, experts were consulted to assess the feasibility of the work plan and to suggest any pre-implementation changes.

During the *process* evaluation, task force members held biweekly meetings in which updates, positive stories, and problems were discussed. Meetings were also held with collaborating teachers, the elementary school principal, and reading specialists. The faculty members for the education students conducted structured observations, provided feedback, and held weekly debriefings with the whole class. Education student feedback was used as additional process evaluation data. Further process evaluation data came from "formal and informal academic assessments, structured observations, and curriculum-based measurements" (Zhang et al., 2011, p. 74).

Finally, Zhang and colleagues (2011) focused their *product* evaluation around an assessment of the identified needs being met and the impacts of the program on the at-risk readers' literacy levels. Outcomes were assessed using education student reflections, survey results, education student focus groups, college class assignments, faculty member observations, and input from other key stakeholders in the program. The detail provided within this study demonstrated how proper use of the CIPP Evaluation Model to conduct a formal program evaluation comprises multiple data sets and ongoing observations to evaluate the merit and worth of a program.

Hall, Daly, and Madigan (2010) used the CIPP Evaluation Model to create a standardized model for evaluating student clinical performance based on faculty member survey results regarding use of anecdotal notes. Although all four steps of the CIPP Evaluation Model were addressed within the article, the operational definitions of *context* and *input* did not have high fidelity with the conceptualization of these evaluations by Stufflebeam and colleagues (1971). According to Hall and colleagues (2010), context is "the critical thinking behind nursing students' decisions and actions in the clinical setting and questions how well students bridge textbook knowledge into clinical practice" (p. 157). Context evaluations should focus on goals and needs of stakeholders. Hall and colleagues did not clearly present their context evaluation as a goal or need, but rather framed it more as would be seen for product evaluations that emphasize student outcomes and capabilities.

Furthermore, Hall and colleagues (2010) stated that the "input evaluation considers the ability of the student to develop a plan of care including appropriate nursing interventions" (p. 157). *Input* evaluations focus on options for program implementation, not on student abilities. Again, Hall and colleagues' definition of input appears to be more associated with the expectations of a product evaluation. Due to issues with the operational definitions, the results of the study and the use of the CIPP Evaluation Model will not be explored further. However, the study was worth mentioning to highlight the critical importance of maintaining fidelity to the model to ensure program evaluations are conducted appropriately.

The literature discussed thus far presented examples of the use of the entire CIPP Evaluation Model to guide evaluation studies. Two additional articles by AbdiShahshahani and colleagues (2014) and Alarbeed and Hakim (2014) only used one component of the model for their studies. However, they will be discussed because they provide further evidence for how the CIPP Evaluation Model can be used to guide research in healthcare and healthcare education settings.

Single CIPP Evaluation Model Component Studies

AbdiShahshahani and colleagues (2014) evaluated *input* indicators for four Iranian doctoral education programs in nursing and midwifery. Heads of departments, teachers, program graduates, and current students were surveyed to assess their perceived appropriateness of 37 indicators of quality (identified by the researchers). Specifically, participants were asked about input measures pertaining to faculty members, students,

curriculum, budget, and educational facilities and equipment. The results of this study demonstrated that many different input indicators can be considered in healthcare education research, and that stakeholder feedback regarding each indicator is important to consider for highlighting their different perspectives. The authors of this study presented the data from their input evaluation that they intend to integrate into a study utilizing the full CIPP Evaluation Model.

In another study assessing one component of the CIPP Evaluation Model, Alarbeed and Hakim (2014) reported data from their *product* evaluation. Alarbeed and Hakim used the model as a theoretical framework to guide their evaluation of a faculty development program about blended learning at a School of Nursing in Pakistan. The authors did not explicate how the CIPP Evaluation Model was used to guide their non-experimental, descriptive study; however, evidence suggests that Alarbeed and Hakim primarily focused on a product evaluation as they only discussed the outcomes of the faculty development program. Eleven surveyed faculty members indicated a significant positive change (significance statistic not provided) on questions relating to attitude, knowledge, and behavior as a result of the faculty development program. Unlike the article by AbdiShahshahani and colleagues (2014), Alarbeed and Hakim (2014) did not report intentions of using the full CIPP Evaluation Model in future research on the program, and, thus, did not appear to maintain full theoretical fidelity to the CIPP Evaluation Model.

Summary of CIPP Evaluation Model Utilization Literature

From the above review of the literature, several key considerations for the use of the CIPP Evaluation Model in healthcare and healthcare education research are identified. First, the CIPP Evaluation Model can be used to conduct evaluations at the completion or during implementation of a program. However, a researcher needs to clearly determine in which manner the CIPP Evaluation Model will be used prior to conducting the evaluation in order to enhance fidelity to the model and ensure proper data collection practices are used.

Another key consideration is that researchers must have clear and accurate understandings of the purpose and methods associated with each step of the CIPP Evaluation Model. As demonstrated by Hall and colleagues (2010), inaccurate understanding of the model leads to poor quality, unreliable research. Furthermore, understanding of the relationships within the CIPP Evaluation Model is needed to ensure all steps are addressed appropriately, rather than using a selected step in isolation, thereby detracting from fidelity to the model.

Next, each study reviewed used different data collections methods for each evaluation within the CIPP Evaluation Model. When conducting research using the CIPP Evaluation Model, aspects of the program and key stakeholders must be carefully considered. Following this careful consideration, appropriate data collection methods need to be selected. A study does not need to use every possible data collection method; rather, only the methods that will provide useful data should be selected. However, researchers must also ensure that the data methods selected do not prohibit data collection

from key stakeholders. The study by Petro-Nustas (1996) did not involve all key stakeholders, such as floor nurses or other healthcare professionals, in their evaluation of a quality improvement project; therefore, the author had difficulty reporting the data from the product evaluation. Inclusion of all key stakeholders in the data collection processes may have allowed for better analysis of the product evaluation for this study.

The above literature suggests that the CIPP Evaluation Model can be successfully used in healthcare and healthcare education settings to evaluate programs. The flexibility of the model for use within multiple aspects of healthcare and healthcare education further support this model's utility for this dissertation study.

Limitations in the above discussed literature include a lack of identification of how to use the CIPP Evaluation Model to evaluate an entire curriculum within a university setting. Also, the two national studies discussed explored the use of best practice standards to guide goal creation, yet none of the smaller studies discussed the impact of best practice or accreditation standards on the program and its goals. The literature shows that fidelity to the model, in both defining variables and using the model to guide evaluations, is critical, and failure to maintain fidelity adversely impacts the credibility of the study. Furthermore, while some education studies assessed student opinions as part of the product evaluation, none used norm or criterion referenced tests to evaluate actual student outcomes from completing the educational program.

This dissertation study attempted to address many of the limitations mentioned above. First, this dissertation study designed and tested a process to assess palliative and

end-of-life care content integration in an entire baccalaureate curriculum using the CIPP Evaluation Model as a theoretical framework. Accreditation and national standards for palliative and end-of-life care were included as needs/problems within the context evaluation, in order to include these key stakeholders in the evaluation. A portion of the *product* evaluation focused on assessing whether or not the accreditation and national standards were met. By conducting a detailed exploration of the CIPP Evaluation Model, and confirming accuracy of the study's definitions and methodology, fidelity to the model will be maintained. Furthermore, criterion-referenced tests were used to assess student outcomes (*knowledge, attitudes toward death and toward care of the dying,* and *perceived competence in providing palliative and end-of-life care*) following completion of the baccalaureate program. Next, the extant literature regarding the variables assessed in this study will be discussed.

PALLIATIVE CARE CURRICULUM EVALUATION MODEL VARIABLES

For this dissertation study, the CIPP Evaluation Model was adapted to create the Palliative Care Curriculum (PCC) Evaluation Model. Literature exploring each of the PCC Evaluation Model variables, as utilized within this dissertation study, will now be discussed. First, the literature related to the components of the *context* evaluation of this study will be discussed. For *needs* and *problems*, literature about the American Association of Colleges of Nurses (AACN) *Essentials of Baccalaureate Education for Professional Nursing Practice*, the Texas Board of Nursing (BoN) *Differentiated Essential Competencies of Graduates of Texas Nursing Programs* (DECs), and the

ELNEC *Peaceful Death: Recommended Competencies and Curricular Guidelines for End-of-Life Nursing Care* will be discussed and summarized. For *assets*, literature about student and faculty member characteristics will be discussed and summarized.

Second, for the *input* evaluation, literature describing the ELNEC core curriculum will be discussed and summarized. Third, for the *process* evaluation, literature in which the ELNEC curriculum, or aspects of the curriculum, was utilized in nursing education will be discussed and summarized. Fourth, for the *product* evaluation, literature will be discussed for each of the following outcomes being evaluated: *knowledge of palliative and end-of-life care, attitudes toward death and toward care of the dying,* and *perceived competence in providing palliative and end-of-life care*. Finally, key findings from all of the literature and the implications for this dissertation study will be discussed.

Context

The *context* evaluation for this dissertation study consisted of multiple variables. Under the *needs* and *problems* components of the PCC Evaluation Model, this dissertation study assessed behavioral objectives from several different sources, particularly objectives pertaining to palliative and end-of-life care. Namely, the AACN (2008) *Essentials of Baccalaureate Education for Professional Nursing Practice*, Texas BoN (2011) *DECs*, ELNEC *Peaceful Death: Recommended Competencies and Curricular Guidelines for End-of-Life Nursing Care* (RWJF & AACN, 1998), and ELNEC core curriculum objectives (AACN, 2015b) were assessed. Objectives that reported expectations for palliative and end-of-life care and education were considered

the *needs* for this dissertation study. The remaining objectives within each document not pertaining to palliative and end-of-life care and education were considered the *problem* for this dissertation study, as these represented areas of focus in the curriculum that deter education about palliative and end-of-life care content. The literature summarizing each of these documents' influence on palliative and end-of-life care education will be discussed. The literature for each of these *needs* and *problems* will then be summarized and gaps identified.

Next, within the *assets* component of the PCC Evaluation Model, student and faculty member characteristics, derived from the extant literature, that influence palliative and end-of-life care education and its outcomes were assessed. Articles will be discussed in which student and faculty member characteristics were cited as they pertained to palliative and end-of-life care education implementation and outcomes. The literature for each population will be summarized and gaps identified.

Needs and Problems

AACN Essentials of Baccalaureate Education for Professional Nursing Practice

The AACN (2008) *Essentials of Baccalaureate Education for Professional Nursing Practice*, hereafter AACN Essentials, presents curricular expectations/objectives for baccalaureate nursing education, and serves as one part of the *needs* and *problems* portion of the *context* evaluation in the PCC Evaluation Model. The AACN Essentials represent the expected abilities of any baccalaureate nursing student completing his/her formal education. The AACN (2008) Essentials contain nine overall Essentials with 109

total objectives. The nine Essentials are: 1) liberal education for baccalaureate generalist nursing practice; 2) basic organizational and systems leadership for quality care and patient safety; 3) scholarship for evidence based practice; 4) information management and application of patient care technology; 5) health care policy, finance, and regulatory environments; 6) inter-professional communication and collaboration for improving patient health outcomes; 7) clinical prevention and population health; 8) professionalism and professional values; and 9) baccalaureate generalist nursing practice. The ninth AACN (2008) Essential has one objective that pertains to palliative and end-of-life care education, specifically: the baccalaureate program prepares the graduate to "implement patient and family care around resolution of end-of-life and palliative care issues, such as symptom management, support of rituals, and respect for patient and family preferences" (p. 31).

This objective represents a very small portion (0.92%) of the AACN (2008) Essentials, yet it is important to consider as it helps to direct curriculum integration of palliative and end-of-life care content. Furthermore, many AACN Essentials objectives do not specifically relate to palliative and end-of-life care, yet their content influences key aspects of the provision of palliative and end-of-life care. To identify how the AACN Essentials could guide curriculum development, a review of the literature was warranted.

Next, the literature in which the AACN (2008) Essentials are addressed, as they pertain to curriculum evaluation or development, will be discussed. No articles were identified in which the AACN Essentials were discussed in relation to palliative and end-

of-life care education. Therefore, articles in which the AACN Essentials were discussed as they influence baccalaureate curriculum in other areas will be discussed. The results from these studies provided guidance for how the AACN Essentials were incorporated within this dissertation study. Following a discussion of the each identified article, the literature will be summarized and gaps identified.

AACN (2008) Essentials have been utilized in research to create or critique rubrics used to assess baccalaureate curricula. For example, Davis and Kimble (2011) assessed six simulation rubrics for their inclusion of criteria from each of the nine AACN Essentials. The authors reported that the fifth (healthcare policy, finance, and regulatory environments) and seventh (clinical prevention and population health) essentials were not measured by any simulation rubric studied. Furthermore, most of the rubrics lacked adequate psychometric support and addressed only a small portion of the AACN Essentials. The authors asserted that the results of their study indicated that a new rubric should be created that allows for the full AACN Essentials to be evaluated within simulation exercises.

In another study using the AACN (2008) Essentials as a rubric, Landry and colleagues (2011) developed a course audit tool to assess the current associate to baccalaureate degree program for a nursing education consortium. The audit tool comprised a grid which listed AACN Essentials content in rows and program courses in columns. An "X" was placed in boxes for which the AACN Essentials content was covered in the respective program course. The result of the audit allowed educators to

make modifications to the curricula in order to ensure all AACN Essentials were addressed within the program.

In addition to their utility in creating and critiquing rubrics, the AACN (2008) Essentials have been used to guide the development of specific learning activities. Founds, Zewe, and Scheuer (2011) explained that the curricular framework which guided their study of a high-risk obstetrical simulation was derived from the AACN Essentials. The authors explained that the AACN Essentials were used to develop all course objectives, and, therefore, the simulation objectives. Tschannen and Aebersold (2010) used AACN Essential objectives to develop a pilot project for senior nursing students in which they conducted a root cause analysis. In another example, Odell and Barta (2011) used the AACN Essentials, Institute of Medicine (IOM) competencies, and the Quality and Safety Education for Nurses (QSEN) competencies to guide a quality improvement project for senior nursing students. Instructors partnered with hospital unit managers to help students identify quality improvement projects, and then partnered with the health science librarian to assist students with identifying credible sources of information for their projects. Students collected data, proposed or implemented solutions, and presented their projects to their class.

AACN Essentials have also been used to create adapted performance expectations for generalist nurses. Dolce (2014) used the AACN Essentials as a framework upon which an inter-professional faculty toolkit for oral health nursing education could be built. For each essential, professional nursing practice expectations were defined within

the scope of oral healthcare. Furthermore, inter-professional expectations for education and practice were woven throughout the adapted framework. Educators were encouraged by the authors to use this toolkit to ensure adequate oral health content is provided within nursing education.

In addition to use with rubrics, learning activities, and practice expectations, the AACN (2008) Essentials have also been used to guide curriculum development or revision. Hendricks and colleagues (2012) created a consortium through which online associate to baccalaureate degree programs could be developed. The structure of the curriculum was based upon the AACN Essentials, and all members within the consortium took careful steps to ensure that the new online curriculum encompassed all aspects of the Essentials. Similarly, Hickey, Forbes, and Greenfield (2010) explained that the AACN Essentials and the IOM competencies (which are included within the AACN Essentials) were used to guide and direct a curricular revision for their school's baccalaureate nursing program. Mailloux (2011) used the AACN Essentials, state board of nursing and accreditation standards, and the National Council of State Boards of Nursing's test plan to identify required content for their curriculum revision. Furthermore, Mailloux explained that the AACN Essentials were used as an organizational framework to guide the curriculum revision.

In another study using AACN (2008) Essentials, Kumm and Fletcher (2012) conducted a three-phase curriculum revision. In the first phase, the AACN Essentials were compared to the current curriculum to identify strengths and weaknesses and to

guide future revisions of the curriculum. Faculty members participating in the first phase also outlined ideal qualities of students completing the program. In the second phase, faculty members used the AACN Essentials and the identified student qualities to determine the course content that needed to be covered in the curriculum. Five major themes were identified in this stage: 1) communication/professional development, 2) evidence-based practice, 3) leadership/management, 4) nursing across the lifespan, and 5) population-based nursing. Faculty members used a Q-sort method to prioritize each AACN Essential and its respective objectives within the five identified themes. This process allowed for faculty members conducting the revision to have a better understanding of the expectations of students and the curriculum. In the third phase, the previously collected data was used to construct the new curriculum.

Not only have the AACN (2008) Essentials been used by educators, but they have also been used by hospitals. Martin, Godfrey, and Walker (2015) explained that hospital administrators can use the AACN Essentials to develop an understanding of the expectations of generalist nurses completing their baccalaureate education. This understanding can help administrators develop realistic expectations of new hires' professional practice capabilities.

From the above literature, several key findings have been identified. First, the AACN (2008) Essentials are a critical document to review and integrate into curriculum evaluation. The AACN Essentials outline expectations for nurses completing their baccalaureate education, and many studies have highlighted how this information has

been used to guide curriculum revisions. Second, the AACN Essentials provide general guidelines not specific to any one unique content area, but they can be adapted for specific content areas or to develop specific learning activities. Using the AACN Essentials as a guide ensures the learning activities lead toward desired outcomes for students completing their baccalaureate education. Finally, the AACN Essentials cover a wide array of topics in nursing practice; therefore, educators and curriculum evaluators must be cognizant of the vast array of content that must be covered and adapt curriculum accordingly.

Several gaps in the literature have been identified. First, no article assessed the AACN (2008) Essentials in relation to palliative and end-of-life care. Although only one of the 109 outcomes in the AACN Essentials addressed palliative and end-of-life care, it is still an important aspect of nursing practice. Dolce (2014) demonstrated that the AACN Essentials could be adapted to address a specific practice focus area, such as oral health; therefore, they could be adapted to address palliative and end-of-life care education, although further research in this area is warranted. Furthermore, AACN Essentials have been used in conjunction with IOM and other organizational competencies, but have not been used in conjunction with the ELNEC competencies. Future research in palliative and end-of-life care education warrants a comparison of these and other leading education documents and guidelines to identify shared, unique, or conflicting expectations for nurses entering practice.

This dissertation study will use the AACN (2008) Essential pertaining to palliative and end-of-life care as a criterion for assessing *needs* of the program. The other objectives within the ACCN Essentials will be used as a criterion for assessing *problems* of the program. However, it is not within the scope of this dissertation study to address the gaps identified above. In addition to AACN Essentials, Texas BoN (2011) DECs provide additional standards for palliative and end-of-life care nursing education. These standards will be discussed next.

Differentiated Essential Competencies

The Texas BoN (2011) *Differentiated Essential Competencies of Graduates of Texas Nursing Programs* (DECs) presents accreditation criteria for nursing programs to guarantee they meet state requirements for nursing education, and served as an additional source for the *needs* and *problems* portion of the *context* evaluation of this dissertation study. There are specific DECs for nurses graduating from vocational, diploma/associate degree, and baccalaureate degree programs. The expectation of the DECs is that students display competency in all areas upon completion of their nursing education programs. The DECs contain 25 core competencies are divided into the following categories: member of the profession, provider of patient-centered care, patient safety advocate, and member of the health care team. Each core competency has sub-competencies (knowledge, clinical judgments, and behaviors) that outline 264 specific objectives for nursing students.

According to Poster, Curl, and Sportsman (2011), the third and most recent version of the DECs was developed by representatives from nursing practice and education organizations in Texas. The representatives conducted multiple meetings over a 26 month period to update the DECs to reflect current best practice standards. Eleven competency areas were added to the updated version that was then vetted by administrators from the approved nursing programs in Texas through surveys and focus groups. The authors encouraged that the newest version of the DECs should be used to guide curriculum development/revision in Texas nursing schools.

Not only did nursing program administrators provide input regarding the DECs, but healthcare organizations provided feedback about the accuracy of the competencies. Sportsman, Poster, Curl, Waller, and Hooper (2012) surveyed individuals from healthcare organizations in which nursing students perform their practicum courses. The individuals were asked to rate their degree of agreement that each of the competencies both defined abilities by educational level and differentiated the scope of practice for graduates from each program accurately. Of the respondents (n=155 of 959; 16% response rate), 92.3% agreed or strongly agreed that the DECs defined abilities accurately. Also, 89.1% agreed or strongly agreed that the DECs differentiated by program accurately. Specifically, there was a majority agreement that the DECs within the provider of patient-centered care (74.3%) and member of the healthcare team (63.8%) categories were appropriate. However, a minority reported the member of the profession (42.1%) and patient safety advocate (48%) categories appropriately reflected practice. Follow-up focus groups with

representatives from the organizations further assisted with identifying strengths and weaknesses of the DECs. The authors reported that while the overall survey results indicated an agreement with the DECs, further revisions were warranted based on identified deficiencies.

Three DECs objectives relate to palliative and end-of-life care. In the first objective, students will be able to use **"**evidence-based clinical practice guidelines as a basis of interventions to support patients and families throughout the lifespan, including end-of-life care" (Texas BoN, 2011, p. 41). Second, students will "use current technology and evidence-based information to formulate and modify the nursing plan of care across the lifespan, including end-of-life care" (Texas BoN, 2011, p. 42). Third, students will be able to "evaluate need to intervene to stabilize and prevent negative patient outcomes and/or to support end-of-life care" (Texas BoN, 2011, p. 54). The remaining competencies (98.9%) are not related to palliative and end-of-life care, but rather focus on other aspects of nursing care.

Due to the limited number of competency statements pertaining to palliative and end-of-life care within the DECs; it is clear that there are many other areas of required education within nursing education. There are several key gaps in the literature regarding the DECs. First, no articles were identified in which reliability and validity information was presented for the DECs. The article by Sportsman and colleagues (2012) indicated that healthcare organization staff supported that the DECs are appropriate. However, the study had a 16% response rate, so the results of the study need to be carefully considered.

More research is needed in which the DECs are tested for their reliability and validity in reflecting current nursing practice expectations.

Furthermore, the DECs have not been updated since 2010. Recent trends in healthcare highlight an increase in the use and provision of palliative care services for patients. It is possible that the DECs need to be updated to better reflect the current healthcare system climate, specifically with the inclusion of more expectations for or at least a stronger emphasis placed on palliative and end-of-life competencies.

Even though the DECs were included as part of the *context* evaluation in this dissertation study, it was not within the scope of the study to address the above mentioned gaps in the literature. In addition to accreditation organizations, ELNEC also provides competencies and objectives for palliative and end-of-life care nursing practice. The ELNEC competencies will be discussed next. The ELNEC Core Curriculum objectives will later be discussed in conjunction with the literature for *input* evaluation since the literature is the same.

ELNEC Competencies and Curricular Guidelines

As mentioned in Chapter 1, the AACN developed 15 palliative care nursing competencies and curricular guidelines (AACN, 1998) within their *Peaceful Death* project. These competencies, developed by a panel of experts, represent what is expected of nurses who provide palliative and end-of-life nursing care, regardless of practice setting, and served as an additional source for the *needs* and *problems* portion of the *context* evaluation of this dissertation study. The competencies address multiple aspects

of end-of-life care, including identification of the need for improved professional practice, provision of comfort care to the dying patient, communication, personal awareness, respect, collaboration, assessment using reliable and valid tools, symptom management, outcomes evaluation, holistic care, coping, legal/ethical principles, access to resources, care plan implementation, and using evidence-based best practice information in education and nursing care (AACN, 1998).

No articles were identified in which the ELNEC competencies have been tested or researched. However, Pfitzinger Lippe and Becker (2015) created an instrument to assess perceived competence in providing palliative and end-of-life care, based upon the ELNEC competencies. A 5-point Likert scale was added to each competency. Nursing students from three cohorts completed the instrument before and after an end-of-life simulation. For this instrument, the reliability for assessing difference was calculated (r_{diff} = .93). Therefore, the instrument was reliable for assessing the change in perceived competence in providing end-of-life care for baccalaureate nursing students completing an end-of-life simulation. However, this article only provided reliability support for the internal consistency of the new instrument, and did not provide any support for the reliability of the competencies themselves.

The ELNEC competencies represent experts' expectations for the provision of end-of-life nursing care. Research is needed in which the accuracy or appropriateness of the competencies is evaluated. Furthermore, the competencies were created in 1998, and no evidence was identified that suggested they have since been updated. Steps should be

taken to verify that the competencies reflect current practice expectations. Although there were many gaps in the literature pertaining to the ELNEC competencies, it was not within the scope of this dissertation study to address these gaps. For this dissertation study, the ELNEC competencies were used as a source of *needs* for the *context* evaluation.

In addition to needs, the content evaluation for this dissertation study will assess the assets of the curriculum being evaluated. The assets assessed will be student and faculty member characteristics. Literature about student characteristics will be discussed next.

Assets

For this dissertation study, student and faculty characteristics comprised the *assets* of the *context* evaluation. The literature pertaining to the characteristics for each group will be discussed separately next.

Student Characteristics

For this dissertation study, student characteristic information comprised one part of the *assets* for the *context* evaluation. However, in order to determine which characteristic variables were important to evaluate in this study, a review of the literature regarding palliative and end-of-life care education research needed to be conducted. Specifically, literature in which student characteristics were measured and assessed for their impact on education was explored. For this review, literature discussed was limited to studies in which undergraduate nursing students' (associate degree and baccalaureate

degree) characteristics were measured. First, articles in which characteristics were measured and assessed for their influence on education will be described. Second, articles in which characteristics were measured, but not analyzed for their influence on education will be discussed. Next, the literature will be summarized and primary student characteristic variables will be discussed. Finally, remaining gaps in student characteristic literature will be discussed.

Characteristics Measured and Analyzed

Several nursing education studies have not only assessed characteristic information to describe their student sample, but also have analyzed this data to identify associations between variables, influences of the characteristic variables on education and outcomes, or to assess for group differences in quasi-experimental studies. Some studies have used the characteristic variables to conduct more than one of these analyses. Studies analyzing student characteristics will be discussed first. The findings of the literature review regarding student characteristics are summarized in Appendix D.

Some studies compared students from different nursing programs, thus characteristic information included program of enrollment. Barrere, Durkin, and LaCoursiere (2008) integrated the ELNEC curriculum into their baccalaureate nursing program and assessed attitudes toward care of the dying for traditional bachelor of science (BSN) student (n=39) and accelerated BSN students (n=34). The characteristic information obtained for this sample included the following: age (18-22, 23-27, 28-35, 36-45, 46-55), gender, highest educational degree achieved (high school diploma,

associate, bachelors, masters), previous completion of death education (previous course, content in other courses, none), prior experience caring for someone who was dying (yes/no). Students had significant improvements in attitudes toward care of the dying after completing their curriculum compared to other students in the following situations: no previous death experience (p=.000), enrolled in the traditional BSN program (p=.005), high school or associates degree education (p=.008), and age 18-22 (p=.02). There were significant correlations between highest degree earned, program of enrollment, and age (p=.00). In a multiple regression using the enter method, the highest predictors of attitude change were previous experience in caring for someone who was dying (p=.004) and age 22-25 (p=.053). The other characteristic variables were not significant. This regression model accounted for 30.3% of the variance in attitude change. In a second, stepwise regression, previous experience in caring for someone who was dying accounted for 11.2% of the variance and age accounted for 29.4% of the variance. The other characteristics did not predict attitude change in any meaningful way. This article supports that age and previous experience in caring for dying patients are important to assess since both variables influence end-of-life care education, especially for studies with students from different nursing programs.

In another study comparing students from different nursing programs, Chow, Wong, Chan, and Chung (2014) conducted a cross-sectional cluster analysis of senior-level nursing students in Hong Kong (n=253). The students in the study were enrolled in one of three different nurse training programs (baccalaureate, higher diploma, and

master's degree). Characteristic information obtained for these students included program of enrollment, gender, religious affiliation (yes/no), and previous experience with the death of a loved one (yes/no). The groups varied significantly on all characteristic variables ($p<.05$) except for religious affiliation. Furthermore, end-of-life care experience was assessed with the following three variables: number of times the student had observed end-of-life care (never, 1-2, 3-4, ≥5), number of times the student had participated in end-of-life care (never, 1-2, 3-4, ≥5), and number of times the student had been given instructor feedback about end-of-life care (never, 1-2, 3-4, ≥5). The groups were significantly different for all three experience variables ($p<.001$, $p<.001$, and $p=0.001$, respectively). The results from this study support assessing gender, previous experience with loss/death of a loved one, and previous experience in caring for dying patients, especially in studies assessing nursing students in different programs. Furthermore, this study indicates that different aspects of end-of-life care experience may need to be assessed, such as number of times observing or number of times providing end-of-life care.

Characteristics have also been compared between nursing and non-nursing students. Chen, Del Ben, Fortson, and Lewis (2006) compared death anxiety among experienced nursing students (n=53), inexperienced nursing students (n=49), and non-nursing students (n=50). The characteristic information obtained from these samples included age, gender, ethnicity, religiosity, seeing a violent death, being in a situation with imminent personal death, death of someone close, and seeing a person die. Students

within the experienced group tended to be older ($p<.01$), were more likely to have experienced a death of someone close ($p<.01$), and were more likely to have seen someone die ($p<.01$) compared to students in the other two groups.

In addition to comparing students in different programs, several studies compared nursing students from different geographic regions. Iranmanesh, Axelsson, Häggström, and Sävenstedt (2010) compared Iranian (n=110) and Swedish (n=113) nursing students' attitudes toward care of the dying using the Frommelt Attitudes Toward Care of the Dying (FATCOD) instrument and attitudes toward death using the Death Anxiety Profile-Revised (DAP-R) instrument. The students were enrolled in their fourth, fifth, or sixth semester of nursing education and had cared for at least one dying patient. Characteristic information was obtained about age, religion (none, Islam, Christianity, other), religious activity (every day or some times a week, a few times per month, a few times per year, or never), belief in God (believer, nonbeliever, or unsure), living situation (with parents, with partner, with others, or alone), and hours of education on death and dying. FATCOD responses were correlated with student characteristics and DAP-R responses.

Iranmanesh and colleagues (2010) reported the following significant negative correlations: uncomfortable talking about death with a dying patient and age ($p=0.002$) and death acceptance ($p=0.003$); perceptions that forming a relationship with the family of a dying person is difficult and age ($p=0.003$) and death acceptance ($p=0.002$); not wanting to care for a dying patient and age ($p=0.027$); and frustration about the time

needed to care for a dying patient and age (p=0.004). The following significant positive correlations were identified: uncomfortable talking about death with a dying patient and religious activities (p=0.04) and fear of death (p=0.03); difficult to form relationship with the family of a dying person and religious beliefs (p=0.001); and not wanting to care for a dying patient and religious activities (p=0.000). These results suggest that researchers should consider assessing student age and religious beliefs/activities as these are associated with differences in attitudes towards death and care of the dying, especially when assessing students being educated in different countries.

Similarly, Smith-Stoner, Hall-Lord, Hedelin, and Petzäll (2011) compared concerns about dying for nursing students in California (n=142), Norway (n=106), and Sweden (n=141) who were beginning their nursing education. Characteristic information obtained from the students included: age, gender, experience in healthcare (yes/no), months of experience in healthcare, previous experience caring for dying patients (yes/no), have a relative who died within the last year (yes/no), cared for a relative who died (yes/no), age of first exposure to death, and which loved one died in first exposure to death (relative, friend, pet, other). Of these characteristics, age, healthcare experience, previous experience caring for dying patients, and age when first exposed to death were significantly different between groups (p<.05). Students in Norway (M=23.0, SD=6.20) were younger than students in California (M=24.3, SD=7.14) and Sweden (M=24.3, SD=5.95). Fewer students in California (32%) had previous healthcare experience prior to starting their nursing education compared to students in Norway (77%) and Sweden

(67%). Students in California (30%) cared for dying patients less than students in Norway (69%) and Sweden (76%). Finally, students in Norway were on average the youngest (M=9.9, SD=5.05) when they first experienced death compared to students in California (M=12.1, SD=5.82) and Sweden (M=10.0, SD=4.68). These results suggest that, when assessing students from different countries, researchers may want to assess age, previous healthcare experience, previous experience caring for dying patients, and age when first exposed to death as these can vary by country where students grow up and/or attend nursing school.

Not only can characteristic variables vary by country, but differences can be observed within different regions within one country. Arslan, Akca, Simsek, and Zorba (2014) assessed attitudes toward care of the dying in third and fourth year nursing students from three universities in Turkey (n=222). The following characteristic information was obtained from students: gender, age (21 years, 22 years, 23 years, 24 ≥ years), place of residence (city, rural area, metropolitan), chose the nursing profession of their own accord (yes/no), religious beliefs (believer, devoted believer, nonbeliever), knowledge and information most important for a nurse caring for a dying patient (legal and ethical issues, communicational knowledge, cultural differences), previous experience with death of a significant other (yes/no), previous experience caring for a dying patient (yes/no), and willingness to care for a dying patient (yes/no). When assessing differences in attitudes toward care of the dying by these categories, significant differences ($p<.05$) were found for students with differences in religious beliefs, previous

experience in caring for a dying patient, and willingness to care for a dying patient. Researchers should consider assessing these characteristic variables when comparing students from different schools across a region or country.

The previous study compared students in Turkey. Another study compared students in Iran. Iranmanesh, Savenstedt, and Abbaszadeh (2008) compared attitudes toward care of the dying in nursing students from two states in south-east Iran, Kerman and Bam. Characteristic information about gender, age, previous education on death and dying, previous experience caring for dying patients, and previous experiences with death, including those of a loved one or a near-death experience, was assessed. The primary difference between the samples was in experiencing a death, as 97% of the students from Bam reported having experienced the death of a loved one or having a near death experience, whereas only 10% of the students from Kerman reported these experiences. The authors noted that a major earthquake had recently devastated Bam, likely accounting for this difference. Only one variable, previous death experience, was found to be positively correlated with FATCOD responses ($p<0.05$). However, given the unique historical events influencing these students, these results should be interpreted cautiously.

In addition to using characteristics to compare students in different programs or in different geographic locations, researchers use characteristics to compare intervention and control group outcomes. Conner, Woncha Loerzel, and Uddin (2014) educated undergraduate nursing students (n=58) in a death and dying elective course and compared

these students' learning outcomes to students in a control group (n=65) that did not receive end-of-life care education. Characteristic data was obtained from students as follows: age (18-27, 28-35, 36+), gender, religion (religious affiliation/no religious affiliation), nursing program (basic, associate to bachelor's degree, concurrent), highest degree held (associate's, bachelor's/master's), previous education on death and dying (none, content in other courses, prior course), previous experience caring for a dying person (yes/none), previous experience with loss (no previous loss of someone close/lost someone close within the past year), present experience with loss (not dealing with an impending loss/presently dealing with a loved one with <1 year to live). Significant differences were noted between the groups for previous education on death and dying and previous experience with loss (both $p<.05$). A significant interaction was noted between the groups and religion on the post-test DAP-R approach acceptance subscale ($p<.05$), meaning students with no religious affiliation in the control group had lower post-test scores than at pre-test whereas intervention students with no religious affiliation had higher scores at post-test compared to pre-test. Significant relationships were noted between previous end-of-life care education and DAP-R fear subscale post-test scores ($p<.05$) and between previous experience in end-of-life care and post-test DAP-R escape acceptance ($p<.05$). These results indicate that previous education on death and dying, previous experience with loss, and religion are characteristic variables that researchers should consider assessing in intervention studies.

Two qualitative studies made brief references to how the characteristics measured influenced outcomes. Parry (2011) conducted a qualitative phenomenological study assessing five nursing students' first experiences with death. Although data was not provided regarding characteristics, the author reported that previous healthcare experience and age did not seem to influence reactions to students' first death experiences. Also, in their qualitative study assessing third-year Australian nursing students' (n=87) attitudes, knowledge, and education about end-of-life care, Adesina, DeBellis, and Zannettino (2014) assessed participants' gender (no significant effect on attitudes), previous experience caring for dying patient (previous experiences typically were not related to nursing education experiences), and age (older age associated with more confidence in caring for dying patients).

The previous review explored studies for which student characteristics were measured and analyzed for their influence on education. Other studies have only collected characteristic information from students in order to describe their sample. Although these studies do not provide evidence to support whether or not a given characteristic variable may influence outcomes, they do provide support for which characteristics may be considered important to assess in palliative and end-of-life care education research. The studies in which student characteristics were measured for descriptive purposes only will be discussed next.

Characteristics Measured but Not Analyzed

Several studies measured nursing student characteristics for descriptive purposes only. Brajtman Fothergill-Bourbonnais, Casey, Alain, and Fiset (2007) conducted a mixed-methods study assessing outcomes for Canadian nursing students (n=58) graduating from a baccalaureate program. Characteristic data collected for students were age, previous education and work experience, and previous education specific to end-of-life care topics. Woncha Loerzel and Conner (2014) obtained the following characteristic information from their study of a death and dying online elective course: age (18-22, 23-27. 28-35, 36-45, 46-55), gender, religion (Agnostic, Christian, Hindu, Jewish, Sikh, Spiritual, none), highest education achieved (associate degree, bachelor's degree, master's degree), prior end-of-life care education (never had previous education, had end-of-life content in other courses, previous course in end-of-life), experience with caring for dying patients (never cared for people at end-of-life/cared for people at end-of-life), and previous experience with loss (no previous experience with loss, lost someone close to me in past year, not answered).

Additionally, Huang, Chang, Sun, and Ma (2010) conducted a qualitative descriptive study in which they explored first-year Taiwanese nursing students' (n=12) first experience with death in their practicum courses. Students were asked to provide the following characteristics: age, gender, years of education (five-year junior nursing college/diploma, two-year senior nursing college/associate to bachelor's degree, or four-year senior nursing college), number of days spent attending to dying patients, previous

experiences with death in their family (if so, who), and if they had completed a course in thanatology and a course in palliative care (yes/no).

Other studies obtained characteristic information to compare and/or describe their samples of non-nursing and nursing students. Korzeniewska-Eksterowicz, Przysło, Kędzierska, Stolarska, and Młynarski (2013) pilot tested a pediatric palliative care program with Polish final year family medicine (n=320) and third year nursing (n=55) students in which all participants completed 5 hours of lecture and then only medical students also completed five hours of workshops. The following characteristic information was obtained to compare the groups: gender, place of living (rural, small town, town, big city), have children (yes/no), parents' education level (primary, secondary, academic), medical professional in close family (physician, nurse, pharmacist, others), and religion (Catholic, Protestant, Orthodox, Muslim, Atheist, others). Characteristic information was strictly used to describe the sample.

Another study also used characteristic information to compare medical and nursing student participants. Mutto, Cantoni, Rabhansl, and Villar (2012) analyzed data about medical and nursing students' experiences and attitudes after caring for dying patients, their wishes about caring for dying patients in the future, and their desire for end-of-life care education. Characteristic information obtained from students was gender and age. In an earlier study, Mutto, Errazquin, Rabhansl, and Villar (2010) assessed changes in nursing students' attitudes after caring for dying patients, and also collected characteristic information on gender and age.

One additional study compared medical and nursing students. De Witt Jansen, Weckmann, Nguyen, Parsons, and Hughes (2013) assessed perceived competence in providing palliative care to patients with dementia for final year medical and nursing students in Northern Ireland (n=119 medical, n=65 nursing) and the United States (n=39 medical, n=22 nursing). Characteristic data was collected regarding gender, age (20-30, 31-40, 41-50), race (Caucasian/White, African American/Black, other White background, other Black background, Hispanic/Latino, Indian, Chinese, White and Asian, Other Asian background, Other ethnic group), and previous experience in palliative care or caring for patients with dementia (yes/no).

Kwekkeboom, Vahl, and Eland conducted two quasi-experimental studies in which they obtained characteristic data to describe their samples. Kwekkeboom, Vahl, and Eland (2005) described a semester-long elective program in which students received orientation to palliative care and then performed visits with hospice patients or conducted bereavement telephone calls. The authors obtained characteristic information about age, hours of previous end-of-life care education, race, semester in nursing program (third, fourth, fifth, sixth), experienced death of family member or friend (yes/no), experience in caring for dying patients (yes/no), and death discussed openly in family (yes/no). Kwekkeboom, Vahl, and Eland (2006) assessed the same characteristics, but added "second semester" as an option for semester of enrollment.

Other quasi-experimental studies used characteristics to describe study samples. Weissman (2011) conducted a quasi-experimental study testing the effect of the ELNEC

communication module on first-year associate degree nursing students' self-efficacy with communication. Characteristic information obtained from the intervention and control groups in this study included: gender, religion (Catholic, Protestant, Other), ethnicity (Caucasian, African American, Hispanic), highest academic degree held (high school diploma, high school graduate equivalent degree, associate degree, bachelor's degree, and master's degree), influence of religious beliefs (strong, mild, no influence), previous death education (yes/no), previous experience of the death of a loved one (yes/no), cultural practices' influence on end-of-life care (strong, mild, no influence), presently experiencing a life-changing illness (yes/no), family member seriously ill presently (yes/no), anticipating loss of a loved one this year (yes/no), and experience caring for dying patient between pre-test and post-test (yes/no).

In another quasi-experimental study, Fluharty and colleagues (2012) conducted a simulation with nursing students from four academic institutions (one large, public; two smaller, private universities; one community college). The authors assessed the following characteristics: program of enrollment, age, gender, and ethnicity/race.

Descriptive studies similarly used characteristics to describe their samples. Wallace and colleagues (2009) assessed sophomore (n=61) and senior (n=50) nursing students' knowledge of palliative and end-of-life care prior to integrating the ELNEC curriculum into their program in order to obtain baseline data. Characteristic information obtained for this study included: age, gender, race, religious background, religious practice (not at all, occasionally, and often), and previous end-of-life care education or

experience (yes/no). Al Qadire (2014) assessed knowledge of palliative and end-of-life care for nursing students (n=220) from five nursing programs in Jordan. Characteristic information obtained included: year in the program, gender, and whether or not the student had previous palliative care education.

Qualitative studies also obtained information about student characteristics. Beck (1997) conducted a phenomenological study to determine the lived experience of caring for a dying patient for second and third year baccalaureate nursing students. The author found that 23 out of 49 second and third year students had not had any experience in caring for a dying patient. No other characteristic variables were assessed. Watts (2014) conducted a qualitative descriptive study assessing Welsh graduating nursing students' (n=11) knowledge of palliative and end-of-life care and obtained information about students' age, gender, and location where they obtained their experience with palliative and end-of-life care.

Summary of Student Characteristics

The literature above provides some key findings regarding characteristic information that should be considered for both quantitative and qualitative palliative and end-of-life care education studies. From an analysis of the previously discussed literature (Appendix D), it is clear that gender and age are the most commonly measured characteristic variable in palliative and end-of-life care education research. Five studies (Adesina et al., 2014; Barrere et al., 2008; Chen et al., 2006; Iranmanesh et al., 2010; Smith-Stoner et al., 2011) found age to have a significant impact on education outcomes.

The findings in the literature overall support that gender does not influence end-of-life care education implementation and outcomes, especially due to the lack of significance when it was assessed. Only the article by Chow et al. (2014), which tested for baseline differences between groups, found a significant difference for gender. Religious beliefs or practices were found to have a significant influence on palliative and end-of-life care education implementation and outcomes in two studies (Conner et al., 2014; Iranmanesh et al., 2010). No studies reported significant impacts based on ethnicity or place of residence, thus these variable do not appear to be critical to assess in palliative and end-of-life care education implementation and outcomes research. Program of enrollment is important to consider if students from different programs are being assessed, and findings from the literature support that program of enrollment can significantly impact palliative and end-of-life care education outcomes. Three other characteristic variables were measured frequently and were found, in at least one instance each, to significantly impact end-of-life care education implementation and outcomes. These variables were: previous end-of-life care education, previous experience with death/loss, and previous experience with caring for dying persons, either family or patients.

Regarding the characteristic variables described in the literature, there was no consistency with how each variable was measured, except for gender. Age was measured at the interval or ordinal level. Ethnicity was consistently measured at the nominal level, but different response options were provided. Of note, the ethnicity options provided in studies seemed to have been influenced by the location of the study. For example, a study

conducted in America included answer choices for Hispanics and African Americans whereas studies in other countries did not. Place of residence was treated in the same manner as ethnicity, with no consistent categorizations observed in the literature. Program of enrollment was slightly more consistent, but different countries have different names for their programs, thus a comparison of categories is difficult without a detailed understanding of what each program entails. For example, some studies referred to four-year programs and others to five-year baccalaureate programs. More information is needed to determine the similarity or differences of these programs. Previous palliative and end-of-life care education, previous experience with death/loss, and previous experience caring for dying patients were measured at interval, ordinal, and nominal levels. Some studies asked for students to provide the number of experiences or the hours spent within previous experiences. Other studies simply asked yes or no for the variables. Therefore, although these characteristic variables are commonly reported in the literature, consistency regarding how to measure them is lacking. Furthermore, more evidence is needed to determine which of the possible means of assessing the variables is superior.

Several gaps in the literature were noted. First, as already discussed, there is a lack of consistency with which characteristic variables are measured. Second, some studies analyzed the effect of characteristic variables on study outcomes, whereas other studies solely used characteristics to describe their samples. More research is needed in which the impact of the characteristic variables is assessed to further determine which variables have the greatest impact on end-of-life care education outcomes. Finally, results

are inconsistent regarding whether or not religion, previous end-of-life care education, previous experience with death/loss, and previous experience caring for dying patients impact palliative and end-of-life care education outcomes. Some studies reported statistically significant associations between these variables and outcomes whereas other studies did not find significance. More research is needed to determine the impact of these variables on palliative and end-of-life care education outcomes.

This dissertation study measured the following student characteristic variables: age (interval level), semester of enrollment, courses enrolled in, course repetition (yes/no), religion (Catholic, Protestant, Jewish, Muslim, Hindu, Atheist, None, Other, Prefer not to Answer), previous end-of-life care education (previous course, content in other courses, none), previous experience with the death of a loved one/friend/pet, previous experience caring for a dying loved one/friend/pet, and previous experience with caring for dying patients. For previous experiences, students were able to provide information for up to four deaths in each category. For previous experience with the death of or caring for a loved one/friend/pet, students reported their relationship to the deceased, time since the death, and the nature of their experience with the death (observational, care provider, or other). For previous experience with caring for dying patients, students reported their role in the care experience (nurse aide/tech, volunteer, or student nurse), their involvement (observation or active provider), and, for the first survey only, the timing of the experience (before starting the nursing program or during the nursing program).The results of these characteristics will be discussed in Chapter 4.

Not only was student characteristic information obtained for this dissertation study, but faculty member characteristic information was also obtained. The literature regarding faculty member characteristics in palliative and end-of-life care education will be discussed next.

Faculty Member Characteristics

For this dissertation study, faculty member characteristic information comprised the second part of the *assets* of the *context* evaluation. However, in order to determine which characteristic variables were important to evaluate in this study, a review of the literature regarding palliative and end-of-life care education research was needed. Specifically, literature was explored in which faculty member characteristics were described and assessed for their impact on implementation or outcomes of palliative and end-of-life care education. First, articles in which characteristics were described or assessed with regard to palliative and end-of-life care education will be described. Next, the literature will be summarized and primary faculty member characteristic variables will be discussed. Finally, remaining gaps in faculty member characteristic literature will be discussed.

One attribute of faculty member that was assessed in the literature is their competencies in palliative and end-of-life care and education. Becker (2007) identified six core competencies for palliative care educators. The competencies were intended to be used to guide professional development for individuals teaching palliative and end-of-life care. The first competency pertained to knowledge, specifically using and keeping

current with evidence-based palliative care practice. Second, educators must have technical competence, by which they have an extensive repertoire of palliative and end-of-life-specific teaching strategies that are used in teaching the respective content. In the third competency, cognitive/analytical, educators must role model the use of advanced skills, particularly with communication, in practice and group work. Fourth, educators must have competence in ethical/personal behaviors. In their practice and teaching, educators must display respect, a positive attitude, good ethical practice, and a non-judgmental approach to student statements. The fifth competency was affective, in which educators must have the ability to manage the classroom in a way that makes it safe for student exploration of the various emotional responses to palliative and end-of-life care education. Finally, educators much have intrapersonal competence. In this competency, the educator must manage his/her personal emotional responses to teaching and to student learning and engage in self-care as needed. Although these competencies do not speak directly to faculty dynamics, they do offer a range of characteristics of faculty members that one may want to consider when evaluating the curriculum. For example, an educator who is not experienced with palliative and end-of-life care may struggle to achieve knowledge competence.

The role of the teacher was further acknowledged as critical to palliative and end-of-life care education in a simulation framework. Fabro, Schaffer, and Scharton (2014) created an end-of-life simulation for baccalaureate nursing students. The authors used the National League of Nursing/Jeffries Simulation framework to develop their simulation.

One major component of the model is the teacher, specifically teacher characteristics. The authors recommended that faculty members facilitating end-of-life simulations should have simulation experience and end-of-life care expertise. However, it should be mentioned that this recommendation was reported without any supporting evidence.

Aside from theoretical frameworks, the literature also suggested that expertise or formal training in palliative and end-of-life care education may be a critical characteristic of faculty members. Bassah, Seymour, and Cox (2014) conducted a modified systematic review of undergraduate palliative care education to assist with the development of a palliative care course in Cameroon. Considerations taken from the literature were used to inform course creation for the resource-poor country. From their modified review, the authors determined that faculty members experienced in palliative and end-of-life care were in short supply in resource-poor countries. While expertise in palliative and end-of-life care was preferable, especially the completion of "train-the-trainer" courses, the authors asserted that nurses with experience in caring for people with life-threatening conditions could be used as an alternate educator. However, the authors further asserted that bringing in an expert from overseas would be preferable to nurses with experience in end-of-life care, but this may not be an option for schools with financial constraints. The findings from this study supported that faculty members with formal training or expertise in palliative and end-of-life care may be the preferred educators to conduct education on the topic. Therefore, an assessment of a faculty member's formal training and expertise may be warranted.

Additional literature supported that assessment of faculty member expertise is of importance when evaluating palliative and end-of-life care education. Brajtman, Fothergill-Bourbonnais, Casey, Alain, and Fiset (2007) conducted a mixed-methods study assessing palliative care education needs for Canadian nursing students (n=58) graduating from a baccalaureate program. In addition to collecting data from students, seven faculty members were interviewed for information about palliative and end-of-life care education within their curricula. Faculty member characteristics reported in the study included palliative care experience or knowledge in relevant palliative care areas, such as pain management. The authors asserted in their discussion that knowledge and experience in palliative care and teaching strategies is needed to effectively maximize student learning of the required content. Therefore, an assessment of experience and knowledge in palliative and end-of-life care for faculty members should be considered in evaluating baccalaureate curriculum.

Aside from expertise and experience, faculty member beliefs about palliative and end-of-life care may also need to be considered. Condon, Grimsley, Kelley, and Nissen (2013) interviewed four faculty members regarding their end-of-life beliefs in an attempt to uncover aspects of a hidden curriculum that might be integrated into or emphasized within palliative and end-of-life care education. The authors asserted that a faculty member's beliefs likely sway them toward spending more time teaching certain content or using a preferred teaching strategy with palliative and end-of-life care content. From analysis of the four faculty members' reports of their beliefs, the authors determined that

personal experiences influenced palliative and end-of-life care beliefs. Furthermore, two faculty members felt it was important for teachers to be familiar with the stages of grief; the other two faculty members referred to holistic palliative care practices as a primary belief. These findings highlighted the diverse beliefs of faculty members regarding end-of-life care. The authors asserted that faculty members must be aware of and allow for differing beliefs within the curriculum; failure to do so may result in the creation of hidden curricula. Therefore, in evaluating curriculum, an assessment of palliative and end-of-life care beliefs may be prudent.

When assessing end-of-life curriculum, the professional background of the faculty members may need to be assessed, especially in interprofessional education. Dickinson (2007) surveyed medical schools (n=99) and nursing schools (n=408) regarding their palliative and end-of-life curriculum. Part of the survey included information about faculty member palliative and end-of-life care background. According to survey results, nursing schools primarily used nurses to teach end-of-life content, although some nursing schools reported using other professionals, including: theologians (6%), social workers (4%), psychologists (3%), and philosophers (2%). Medical schools used a wider variety of healthcare professionals to conduct palliative and end-of-life care education.

Aside from experience, beliefs, and expertise, three studies assessed other faculty member characteristics. Jeffers (2014) conducted an interpretive phenomenological study assessing nursing faculty member perceptions of palliative and end-of-life care education. For this study, characteristic information obtained from the ten faculty members

interviewed included: gender, race/ethnicity, age, highest degree obtained, and years of experience in teaching. No characteristic information was obtained about palliative and end-of-life expertise or experience.

Similarly, Wilkie and colleagues (2004) conducted a workshop in which faculty were taught how to use a toolkit for nurturing excellence at the end-of-life transition (TNEEL). The authors explained that TNEEL provided strategies to teach palliative and end-of-life care using innovative, interactive, and technological methods. Before conducting the workshop, faculty members were assessed for their employment position (associate degree nursing program educator, baccalaureate degree nursing program educator, graduate nursing program educator, staff development educator, preceptor, other), if the curriculum contained palliative and end-of-life care content (threaded throughout, dedicated course, some but would like more, no), and faculty members' end-of-life expertise (expert/very comfortable, intermediate/some comfort, novice/uncomfortable, not sure).

The third study assessing characteristics other than beliefs and expertise was conducted by Sullivan and colleagues (2006). The authors followed up with faculty members who had completed a palliative care faculty development program in order to determine the long-term impact of the program on teaching. Characteristics for the faculty member participants that were measured included: gender, degree (doctor, nurse, other), years in practice, prior training in palliative care (yes/no), and number of patients who had died over the past three months. Some information was collected and compared

for statistical differences before the program and at follow-up (6, 12, or 18 months post-program, depending on cohort being assessed). These characteristics included: proportion of time spent in patient care that included teaching ($p=.01$, increased); proportion of time spent in patient care only ($p=.05$, decreased); proportion of time spent in teaching only (not significant); and percent of time spent on palliative and end-of-life care such as teaching, research, patient care, and administration ($p<.01$, increased).

Summary of Faculty Member Characteristics

The literature reviewed about faculty member characteristics has several key finding to discuss. First, only one study, by Sullivan and colleagues (2006), assessed for statistical significance of any of the characteristics measured. However, the statistical significance was looking for change based upon completion of a faculty development program; the significant impact of the characteristics on education implementation or outcomes was not assessed. Future research is needed that explores the impact of faculty characteristics on educational practices and outcomes.

Second, a majority of studies that assessed characteristics focused on palliative and end-of-life care expertise, beliefs, and experience as well as teaching experience. No other characteristics were assessed in more than one study. However, an even more important finding is the lack of literature assessing the impact of faculty member characteristics on palliative and end-of-life care education implementation and outcomes. The paucity of literature precludes a strong determination of which faculty member

characteristics, aside from expertise, beliefs, and experience should be considered when evaluating curricula.

The findings from the literature suggest several gaps that should be addressed in future research. First, studies assessing implementation or outcomes of palliative and end-of-life care education should include faculty member characteristic information, rather than providing characteristics about just students or neglecting to include any characteristic information at all. Second, the current lack of evidence in this area prevents a clear determination of the critical elements of faculty member characteristics to assess in palliative and end-of-life research; future research in this area is warranted. Third, many of the studies that cited faculty member expertise and experience as an important characteristic variable did not have evidence to support this assertion. By beginning to develop a body of literature about faculty member characteristics, evidence can begin to be identified to support that expertise and experience are in fact valid characteristic variables to assess in palliative and end-of-life care education research. This dissertation study addressed one of these gaps by collecting characteristic information of faculty members teaching in the baccalaureate program being assessed. However, it was not within the scope of this study to conduct statistical analyses of the characteristics in relation to program implementation or outcomes. Future research in these areas is warranted.

Due to the lack of clear characteristic variables to assess, the expertise of the researcher for this dissertation study was used as a basis for determining which faculty

member characteristic variables were assessed. The variables included were: years of teaching experience (overall and in baccalaureate programs), years of clinical practice experience, frequency of provision of palliative and end-of-life care in clinical practice, certifications, ELNEC training, and palliative and end-of-life care research focus (if applicable).

All of the pertinent literature for *assets* and all but one component of the *needs* and *problems* for this study's *context* evaluation have been explored, and indications for this dissertation study have been presented. The ELNEC Core Curriculum objectives serve as both the final component of the *needs* and *problems* of the context evaluation and the primary component of the *input* evaluation. The ELNEC Core Curriculum served as the other component of the *input evaluation.* The identified literature for these two variables was the same; therefore, the literature will be discussed once under the *input* evaluation section of this literature review.

Input

The *input* for this dissertation study was the ELNEC Core Curriculum. The ELNEC Core Curriculum includes eight modules: introduction to palliative nursing care; pain management; symptom management; ethical issues; cultural and spiritual considerations; communication; loss/grief/bereavement; and final hours. Each module has specific objectives (Appendix B), which were considered the final components of the *needs* and *problems* portion of the *context* evaluation. Literature in which the ELNEC Core Curriculum or any of its modules were described will be discussed next. Literature

focused on other ELNEC curricula (critical care, pediatric, geriatric, graduate, international, advanced practice) will not be discussed as they contain modules that cater to patient and student populations that were not the focus on this dissertation study. First, the ELNEC Core Curriculum will be described as a whole. Then, each module will be discussed, including its respective objectives and subject matter. Finally, key findings from the literature will be summarized and gaps identified.

ELNEC Core Curriculum

Ferrell, Virani, and Malloy (2006) explained that the ELNEC core curriculum content is based on the end-of-life competencies and curricular guidelines developed by the AACN in 1998 in their *Peaceful Death* project. The ELNEC Core Curriculum was developed by combining information from major national reports, experts' input, and evidence-based practice. The curriculum is regularly revised in response to changes in practice or feedback from individuals receiving ELNEC training. Furthermore, Ferrell and colleagues (2005) reported that the original ELNEC curriculum contained nine end-of-life core components: 1) nursing care at end-of-life; 2) pain management; 3) symptom management; 4) ethical/legal issues; 5) cultural considerations; 6) communication; 7) grief/loss/bereavement; 8) achieving quality care; and 9) care at the time of death. Several years after the creation of the ELNEC Core Curriculum, the quality care module was removed as an isolated component and the content was integrated throughout the entire ELNEC Core Curriculum.

The ELNEC Core Curriculum was originally, and continues to be, disseminated via formal three-day long train-the-trainer courses for nursing faculty member and clinical educators. The ELNE Core Curriculum modules are also available for purchase online. Individuals trained in train-the-trainer courses receive education on the ELNEC Core Curriculum modules as well as methods to teach the curriculum to students and nurses. Malloy and colleagues (2006) explained that individuals completing the train-the-trainer courses receive a 1000-page syllabus, presentation slides, and a CD-ROM with all the educational materials used within the Core Curriculum, such as case studies and readings. The ELNEC train-the-trainer program intends for educators who complete the training to disseminate the content within their programs with students or practicing nurses.

Malloy, Virani, Kelly, Harrington-Jacobs, and Ferrell (2008) explained that there are eight threads pervasive in all of the ELNEC modules. First, end-of-life care is provided for families, not just the patient. Second, the nurse must serve as an advocate for the patient and family. Third, culture influences end-of-life considerations. Fourth, vulnerable populations, including children, poor, elderly, and the uninsured, have unique needs requiring attention. Fifth, end-of-life situations are pervasive across all aspects of the healthcare system. Sixth, the end of life is associated with great financial implications for the healthcare system, patients, and families. Seventh, end-of-life care will be provided for patients with conditions not limited to cancer and HIV/AIDS. Finally, quality end-of-life care relies on an interdisciplinary approach to care. In addition to

these eight common threads, Malloy and colleagues (2014) explained that information from the text, *Standards of Practice for Culturally Competent Nursing Care* by Douglas, has been integrated throughout the ELNEC Core Curriculum to ensure that nurses providing end-of-life care are culturally competent.

ELNEC Modules

Each ELNEC Core Curriculum module has unique end-of-life objectives and subject matter areas that nurses need to have knowledge of and be competent in addressing within their nursing practice. For the first module, introduction to palliative care, Sherman, Matzo, Panke, Grant, and Rhome (2003) reported that there are six primary subject matter areas as well as a conclusion that should be taught. First, trends with death and dying in America are explored. Second, the principles of hospice and palliative care are discussed. Third, the module requires exploration of how quality of life is based upon individual assessment of end-of-life care. Fourth, individuals are taught about opportunities for growth at the end of life. Fifth, life closure is discussed. Finally, the module focuses on the role of the nursing in improving end-of-life care and providing palliative care services whenever appropriate. The most current edition of the ELNEC Core Curriculum (AACN, 2015b) reported four behavioral objectives that nurses must achieve after completing the module, such as describing the role of the nurse in palliative care or discussing various aspects of quality of life.

The second module is pain management. Sherman, Matzo, Paice, McLaughlin, and Virani (2004) outlined the content within the pain management module. There are

seven main components bookended by an introduction and conclusion. The module includes the following subject matter: barriers to pain relief, pain assessment, pharmacologic therapies, non-pharmacologic therapies, other pain-relieving therapies, pain during the last hours of life, and intractable pain at the end of life. The module also has four main behavioral objectives focused on assessment and management of pain and the nurse's role (AACN, 2015b).

The next module is symptom management, which focuses on end-of-life symptoms other than pain as well as interventions to address each symptom (Russell, 2004). The module emphasizes that interprofessional collaboration is needed to effectively manage symptoms. Symptoms taught within the module are: dyspnea, cough, anorexia and cachexia, constipation, nausea and vomiting, fatigue, depression, and anxiety. Sherman, Matzo, Coyne, Ferrell and Penn (2004) identified four objectives for those completing the symptom management module. Individual completing the symptom management module must be able to: 1) identify common end-of-life symptoms; 2) identify causes of the symptoms; 3) properly assess symptoms; and 4) understand which interventions can be used to prevent or reduce symptoms. These objectives remained the same in the current Core Curriculum (AACN, 2015b). Sherman, Matzo, Coyne, Ferrell, and Penn (2004) further described the pharmacologic and non-pharmacologic interventions for addressing each of the symptoms contained within the module, such as the use of antidepressants or empathetic listening to reduce anxiety.

The fourth module in the ELNEC core curriculum is focused on end-of-life ethical issues. Marshall (2001) provided an example of the four types of content within this module: 1) addressing ethical challenges in practice; 2) decision making and communication concerns; 3) treatment considerations; and 4) care and comfort for patients. Additionally, Marshall, Matzo and colleagues (2004) explained that the ethics module includes content about nurses' moral framework, advanced care planning, patient self-determination act, legal documents outlining patient decisions (living wills, advanced directives, etc.), ethical issues specific to the end of life, and justice at the end of life. The three objectives for this module are: 1) discuss ethical issues and dilemmas in palliative and end-of-life care; 2) describe nursing roles in ethical decision-making; and 3) utilizing ethical principles in palliative and end-of-life care (AACN, 2015b).

The fifth module in the ELNEC curriculum focuses on cultural and spiritual considerations at the end of life. Matzo and colleagues (2002) outlined the subject matter within this module. First, an introduction about culture is conducted. The introduction starts with an exploration of definitions of culture followed by an explanation that culture and race/ethnicity are not the same concept. Next, different components of culture are presented, such as age, employment, and financial status. The introduction finishes with a discussion of the domains of culture, cultural competence, and interdisciplinary teamwork. Second, the ELNEC module includes education about cultural assessment of the patient and the nurse. Third, culture in the context of communication is discussed as well as the role of families within communication. Finally, cultural beliefs about death,

dying, bereavement, and spirituality are explored for various cultures, such as Hispanics, African Americans, and Native Americans. The objectives for this module (AACN, 2015b) reflected the components as presented by Matzo and colleagues (2002).

Communication is the sixth ELNEC module. Within the communication module, Matzo, Sherman, Sheehan, Ferrell and Penn (2003) explained that emphasis is placed on three key principles: 1) the importance of communication at end-of-life; 2) interprofessional collaboration and communication are required for patient and family communication; and 3) nurses working with patients at the end-of-life must be skilled at verbal and nonverbal communication as well as listening and presence. Expectations for end-of-life communication within the ELNEC Core Curriculum are that the nurse: is honest and truthful; does not abandon patients and their families; seeks out information about values and goals and then strives to help the patient achieve them; is realistic about options; considers the overall situation when helping patients make decisions; provides timely responses to questions; asks questions of patients about needs/wishes/expectations; facilitates communication and understanding within the interprofessional team; seeks help when needed; asks herself to consider what choices she would make if this was her family member; and listens. The module also explores factors affecting communication, barriers to effective communication, and helping patients and families cope. The three objectives for this module focus on: 1) importance of continuous communication between the interprofessional team, patient, and family; 2) factors

influencing palliative care communication; and 3) expected communication characteristics (AACN, 2015b).

The seventh ELNEC core module focuses on loss, grief, and bereavement. Matzo, Sherman, Lo, Egan, Grant, and Rhome (2003) outlined the content within the loss/grief/bereavement module, which has four main subject areas. The first subject encompasses the grief process, aspects of loss/mourning/grief/bereavement, and types of grief. The second subject area focuses on grief assessment. Within this subject area, the ELNEC Core Curriculum includes discussion of who grieves, when grief occurs at end-of-life, and nursing assessment of grief. In the third subject area, called bereavement interventions, nurses are taught about end-of-life care plans, attitude, cultural practices, what to say, anticipatory grief, grief interventions, unique interventions for children and parents, and completing the grief process. Finally, aspects of the nurse, including death anxiety, cumulative loss, and grief are explored. The module concludes with a discussion of death anxiety, defenses, personal awareness of death, cumulative loss, adaptation stages, factors influencing adaptation, and support systems. The four objectives for this module reflected this content (AACN, 2015b), especially key definitions, interventions to help with grief, death awareness and cumulative loss, and the use of support systems for nurses.

The final module within the current ELNEC Core Curriculum focuses on the final hours of death. Sherman, Matzo, Pitorak, Ferrell, and Malloy (2005) described the following three main focus areas of the module: 1) actual time of death has its own

unique considerations; 2) time of death requires special care for patients and families' physical, psychosocial, and spiritual needs; and 3) professionals should assess their own experiences at time of death to improve their practice. There were originally six module objectives. First, those completing the module would be able to assess and identify death. Second, individuals would be able to assess and care for patients and families' physical, psychosocial, and spiritual needs. Third, individuals would have increased knowledge of death and dying practices for different cultures. Fourth, individuals would know five responsibilities of the nurse following the patient's death. Fifth, individuals would reflect upon their personal experiences with death. Finally, individuals would identify useful support resources for patients and families. In the current version of the core curriculum, these six objectives have been merged into three (AACN, 2015b).

Each ELNEC Core Curriculum module has its own unique areas of focus and expectations for those individuals who have learned the respective content. These modules can be used collectively or in isolation within nursing education, depending on the intended purpose of the educator. However, the use of the ELNEC Core Curriculum is not restricted to education. Ferrell, Virani, Malloy, and Kelly (2010) discussed how the ELNEC Core Curriculum components could be applied to oncology nursing practice. For example, palliative care within oncology nursing can be manifested through early and ongoing consideration and application of palliative care principles, keeping in mind patient goals. Pain management should be focused on assessment and treatment of all types and causes of pain throughout the oncology experience. Symptom management

should encompass assessing and managing symptoms, both physical and psychological, from the disease process or from treatment side effects. For culture, the authors referred to exploring cultural beliefs about cancer, death, spirituality, and end-of-life decision making. Within the ethics module, oncology nurses should be cognizant of ethical concerns commonly encountered in cancer care and the use of family when addressing these concerns. For communication, nurses should be aware of the importance of and barriers to effective communication as well as their role when communicating with patients in various situations. The loss, grief, and bereavement module entails the assessment of and intervening with grief, including complicated grief. Finally, at the time of death, oncology nurses need to be aware of the physical assessment findings associated with death as well as intervening with the dying patient and family for any concerns, including physical, psychosocial, or spiritual.

Based upon the literature just described, key findings and gaps regarding the ELNEC Core Curriculum will be described next.

Summary of ELNEC core curriculum

The eight modules within the ELNEC Core Curriculum provide a very detailed blueprint for educating students or practicing nurses about palliative and end-of-life care. Each module is designed to address a specific aspect of palliative and end-of-life care. Each module also has specific behavioral objectives that can be evaluated to ensure adequate learning has taken place. Furthermore, all of the modules are founded upon several common themes that are pervasive throughout the module content. The ELNEC

Core Curriculum is the gold standard for end-of-life care education due to its detail, foundation in current best practice standards, and comprehensiveness.

A primary limitation of the literature about the ELNEC Core Curriculum was the lack of specificity regarding the amount of time required to complete each module. Furthermore, although subject matter for each module was described, it remains unclear which pieces require more emphasis when using the module in baccalaureate nursing education. Some subject matter areas may be well understood by students or nurses from prior education, whereas other areas may be novel. While the objectives provided some guidance for prioritizing the focus of the education, they did not encompass all aspects of the module that should be taught to students and nurses. A more detailed work plan for conducting the education would further ensure proper emphasis is placed on areas of greater importance or need as well as verify all content in taught. Finally, a commonly cited limitation of nursing education is the lack of end-of-life content within baccalaureate programs; however, no study compared current curricular practices on palliative and end-of-life care education with the ELNEC core curricular practices.

This dissertation study began to address the final identified gap in the literature: the lack of assessment of palliative and end-of-life content within baccalaureate programs. For this study, a process was designed and tested to evaluate a current baccalaureate curriculum in which the ELNEC Core Curriculum had not been purposefully integrated was compared to the ELNEC Core Curriculum to determine the

thoroughness of palliative and end-of-life care content integration within nursing education.

The next stage of the CIPP Model is *process* which evaluates the implementation of a program. Literature discussing the process stage as it was defined for this dissertation study will be presented next.

Process

For this dissertation study, the *process* evaluation was the implementation of ELNEC Core Curriculum content within an existing baccalaureate nursing curriculum. Literature in which issues of implementation of the ELNEC Core Curriculum was discussed, including target participants, timing, content, and teaching strategies, will be presented next. Literature focused on other ELNEC curriculums (critical care, pediatric, geriatric, graduate, international, advanced practice) will not be discussed as they contain modules that cater to patient and student populations that were not the focus of this dissertation study. Once all relevant literature is presented, key findings will be summarized and gaps identified.

Target Participants

One consideration for implementation of the ELNEC Core Curriculum is the participants targeted to receive the education. As previously mentioned, there are several types of ELNEC curricula, each one intended to provide education about palliative and end-of-life care for a unique population. Ferrell, Virani, and Malloy (2006) explained that the ELNEC Core Curriculum was originally designed to train nursing faculty members so

that they could then educate students. The first installments of the ELNEC train-the-trainer courses were specifically targeted for undergraduate nursing faculty members. Attendance to the train-the-trainer courses increased faculty member integration of end-of-life content into their programs (Ferrell et al., 2005) and resulted in increased faculty member extracurricular participation with activities and issues focused on end-of-life care (Ferrell et al., 2006).

The ELNEC train-the-trainer course was later offered to educators in the clinical setting with the intention that the educators would subsequently provide training about palliative and end-of-life care to practicing nurses. The ELNEC Core Curriculum content remained the same for educators as for faculty members, but the teaching strategies discussed for educating nurses were slightly modified to help facilitate effective education within healthcare settings (Ferrell et al., 2006).

Regardless of who attended the ELNEC train-the-trainer programs, the intention of the creators of the ELNEC Core Curriculum was that the content be disseminated among nursing students, both undergraduate and graduate, and practicing nurses so that palliative and end-of-life knowledge and quality of care for dying patients could be improved. As of February 2015, 19,500 nurses and healthcare professionals have completed the train-the-trainer courses, and it is estimated that over 500,000 nurses and healthcare providers have subsequently been educated on end-of-life care (AACN, 2015a).

In addition to train-the-trainer courses, the ELNEC Core Curriculum can be directly implemented within clinical organizations, such as hospice facilities, to ensure quality patient care is provided. Martin (2011) created a template for hospice organizations to use to conduct a 4-day blended orientation for nurses. The template used the online version of the ELNEC Core Curriculum to provide education to newly employed nurses. Martin's template also included additional educational topic areas that could be covered during orientation, but are not related to palliative care, such as safety/ergonomics, privacy/HIPPA, and policy and procedures.

The ELNEC Core Curriculum requires proper identification and implementation of the content with the appropriate target audience to ensure the education is provided as intended by its creators. Furthermore, those implementing the ELNEC Core Curriculum within educational programs need to consider proper timing and arrangement of the eight ELNEC Core Curriculum modules. Literature in which module timing is explored will be discussed next.

Timing

The ELNEC train-the-trainer programs were structured such that modules are taught in sequential order, starting with introduction to palliative care nursing and ending with final hours of life. However, not all nursing curricula are structured similarly to the train-the-trainer programs or the Core Curriculum. Within baccalaureate programs, the ELNEC Core Curriculum modules may need to be spread out throughout a semester, rather than being implemented during three intensive days of training, which is the timing

for the train-the-trainer program. Malloy and colleagues (2011) explained that, due to already packed curricula, the ELNEC Core Curriculum modules may need to be spread throughout a baccalaureate curriculum. Therefore, special considerations are needed for integrating the ELNEC Core Curriculum within nursing programs.

One article was identified that explored some of the special considerations for timing of ELNEC Core Curriculum implementation. Barrere and colleagues (2008) conducted a quasi-experimental, longitudinal, repeat measures study in which the ELNEC Core Curriculum was integrated throughout traditional and accelerated baccalaureate nursing curricula. The authors noted that ELNEC Core Curricular content needed to be integrated appropriately, such that introductory ELNEC content was taught prior to more complex content, such as the *Final Hours* module. Furthermore, the ELNEC Core Curriculum content was taught in existing courses in which the content best fit. For example, symptom management was taught in an advanced medical/surgical course. Barrere and colleagues also reported that ELNEC Core Curriculum content was reinforced through activities in lecture and clinical classes, although the specific content may not have been taught in these specific courses.

There was limited literature identified which addressed timing and sequencing of modules within nursing education. However, one area of ELNEC Core Curriculum implementation in which ample literature was identified related to the content covered within palliative and end-of-life care education. Content refers to the specific subject

matter within each ELNEC Core Curriculum module that is covered in the provision of nursing education. The literature discussing content will be explored next.

Content

The ELNEC Core Curriculum content has been integrated into nursing programs in various manners. Some baccalaureate nursing programs have elected to integrate the entire ELNEC Core Curriculum within a specific course. For example, Dobbins (2011) conducted an experimental study assessing the impact of implementing the entire ELNEC Core Curriculum within an associate degree nursing elective course. In the intervention group, students received didactic education focused on the content from all eight ELNEC Core Curriculum modules. Students then applied their knowledge in hospice and funeral home visits and when observing a film about a person's end of life. Students in the control group were enrolled in a required three hour nursing process course for which one three-hour lecture on palliative and end-of-life care was taught. The content for the three-hour lecture came from the ELNEC Core Curriculum, but did not cover all of its content. Both groups had improvement in attitudes toward care of the dying as a result of their education on palliative and end-of-life care.

Another study implemented the ELNEC Core Curriculum within a single course. Woncha Loerzel and Conner (2014) educated undergraduate nursing students in a death and dying elective course. The authors cited the utility of the ELNEC Core Curriculum for improving student knowledge in caring for dying patients. Within the course, the students were taught about various aspects of palliative and end-of-life care including,

life expectancy, causes and physiology of death, symptom management, cultural and spiritual considerations, ethics and legal considerations, communication, caring for families, loss/grief/bereavement, children, and grief in nursing. While the two previously described studies assessed integration of the entire ELNEC Core Curriculum within one course, other studies assessed integration of a subset of the Core Curriculum modules across educational programs.

One such study was conducted by Letizia and Jones (2012) who tested education for nurse practitioners on end-of-life care in a quantitative descriptive study. The authors explained that they provided three online education modules based on ELNEC Core Curriculum content to the nurse practitioners: 1) quality care at end-of-life; 2) pain and symptom management; 3) communication and ethics issues. Although not stated in the article, content on culture, loss/grief/bereavement, and final hours were not specifically included in the online education modules. The authors did not explain why some ELNEC Core Curriculum content was selected over other content. Similarly, Jeffers and Ferry (2014) used the ELNEC Core Curriculum to educate senior nursing students in an end-of-life elective course. According to the authors, the content taught in the course included: assessment of patient physical, psychosocial, and spiritual needs; considerations of the patients' cultural and religious beliefs; communication; and ethical/legal issues. From the article, it was not explicitly clear that content from the introduction to palliative care, final hours, and the loss/grief/bereavement modules were taught in this course.

In addition to selecting the desired content to be taught, faculty members may need to tailor the ELNEC Core Curriculum to the specific population receiving the education. Cooke, Gemmill, and Grant (2011) created a palliative education session for patients experiencing relapse after a stem cell transplant. After receiving training on the ELNEC Core Curriculum, the authors developed an education session for these patients. The session had three parts: 1) relapse- focused on assessing patient knowledge and exploring their feelings; 2) family- focused on enhancing patient communication with their families; and 3) bereavement- in which follow-up was conducted with families following the patient's death to help them explore their grief. Although not cited within the article, the session appeared to have been adapted from ELNEC Core Curriculum content within the introduction to palliative nursing care, communication, and loss/grief/bereavement modules.

Implementation of palliative and end-of-life care educational programs requires careful consideration of the content to be provided. The next implementation element that must be considered is which teaching strategies are used to provide the education. Literature exploring teaching strategies for each ELNEC Core Curriculum module will be explored next.

Teaching Strategies

Different teaching strategies have been utilized within educational programs integrating the ELNEC Core Curriculum. The strategies selected may be dependent on the desired outcomes for those receiving the education. Matzo, Sherman, Penn, and

Ferrell (2003) provided examples of teaching strategies that can be used to address all three domains of learning (cognitive, affective, and psychomotor) within ELNEC Core Curriculum implementation. Within the cognitive domain, didactic strategies, case studies, writing assignments, and activities comparing and contrasting clinical experiences with best practice could be used. To address the affective domain, the authors recommended personal assessments of cultural and spiritual values, experiential exercises such as writing a letter to death or completing a loss inventory, small group discussions about ethics, and film observation and reflection. Some strategies addressed both the cognitive and affective domains such as case studies and attending interdisciplinary team meetings. Finally, the psychomotor domain could be addressed through listening exercises, role playing, and skill performance in clinical or simulation settings.

In addition to selecting teaching strategies based on the desired domain of learning, the original creators of the ELNEC Core Curriculum have recommended specific strategies to be used for each module. For example, Sherman and colleagues (2003) identified 17 teaching strategies to cover the subject matter within the Introduction to Palliative Nursing module. The specific teaching strategies were: 1) describe death and dying across history using different data sources; 2) use movie or plays to discuss death and dying; 3) create a loss inventory and explore how loss has impacted student attitudes and behaviors; 4) have students define for themselves what "dying well" and "bad death" mean; 5) explore how being diagnosed with a terminal condition changes an individuals'

life priorities; 6) interview elderly individuals to learn about rituals with death and dying; 7) attend interdisciplinary palliative care team meetings; 8) compare and contrast hospice and palliative care; 9) develop a dying character for media; 10) complete case studies focused on appropriate use of palliative care services; 11) engage in reflections from assigned readings; 12) complete case studies focused on suffering; 13) complete case studies focused on the dying process; 14) identify barriers to implementing palliative care and propose solutions; 15) personally reflect and share beliefs and attitudes about death; 16) explore interventions for quality of life issues; and 17) use reflective writing exercises to explore feelings about death and dying.

The second ELNEC core curriculum module focuses on Pain Management. Sherman, Matzo, Paice, McLaughlin, and Virani (2004) stated that the following strategies can be used to teach the pain management module: video observation and reflection about unrelieved pain, case studies, personal reflections from practice, role playing, having patients and families present their experiences, record and review the performance of pain assessments to identify errors and make corrections, complete worksheets for dosage calculation practice, and perform simulations of interprofessional rounds. The third module focuses on Symptom Management. Teaching strategies suggested by Sherman, Matzo, Coyne, Ferrell, and Penn (2004) for the symptom management module include didactic methods, case studies, and experiential learning in simulations.

The fourth ELNEC core curriculum module focuses on Ethical Issues. For this module, Matzo and colleagues (2004) recommended such teaching strategies as didactic methods, small group discussion, case studies, experienced-based learning activities, film observation and discussion, reading and discussion of personal narratives, and personal reflection papers. The fifth ELNEC core curriculum module focuses on Cultural and Spiritual Considerations. Matzo and colleagues (2002) suggested, in addition to didactic education, that video clips, spiritual assessment tools, and case studies be used to teach the content within this module.

The sixth ELNEC core curriculum module focuses on Communication. Matzo, Sherman, Sheehan, Ferrell, and Penn (2003) recommended using recorded role-playing to help identify and reduce barriers to effective communication. Strategies to help improve listening skills involved students pairing up, with one telling a story and the other listening. Groups of three students could discuss questions from a provided list to develop goal-directed communication skills. Video observation and reflection as well as case studies were also suggested as useful strategies. Finally, the authors suggested a schedule for how to use a clinical hospice experience as an opportunity to focus on and develop communication skills.

One study utilized some of the above suggested strategies to teach the communication module. Weissman (2011) conducted a quasi-experimental study testing the effect of the ELNEC Core Curriculum Communication module on first-year associate degree nursing students' self-efficacy with communication. The intervention lasted 2.5

hours and incorporated a didactic session using slides included within the ELNEC Core Curriculum. Next, students observed a film demonstrating communication between healthcare professionals, patients, and families and responded to questions about the observed communication. Then students worked in groups to practice active listening. Finally, students worked in pairs to role play goal-directed communication between patients and nurses. In the control group, students received education via slides, case studies, and discussion, but the education was based upon a chapter of a textbook rather than the ELNEC Core Curriculum Communication module. Both groups improved in their attitudes toward care of the dying. These results may suggest that any education on palliative and end-of-life care may improve attitudes, rather than just education provided within the ELNEC Core Curriculum. However, more research is needed to explore this possibility.

The seventh module focuses on Loss, Grief, and Bereavement. Matzo, Sherman, Lo, Egan, Grant, and Rhome (2003) provided examples of teaching strategies for this module, including: forming informal or formal support groups, exploring responses to a story about the end of life, helping students process multiple losses through a loss history exercise, or case studies.

Finally, the last module of the ELNEC Core Curriculum is Final Hours. Sherman and colleagues (2005) identified useful teaching strategies to educate nurses and students about the content within this module. For didactic education, readings, written materials, slides, and story-telling could be used. Other strategies to help individuals explore their

experiences with death included having individuals discuss good and bad death experiences, writing a letter to death, and drawing pictures of their ideal and worst possible personal death experiences. Additionally, case studies and film observation with reflection could be used to teach the final hours subject matter. All of the strategies just explored were suggested by the original authors of the ELNEC Core Curriculum. As such, activities aligning with many of these proposed teaching strategies are included within the ELNEC Core Curriculum.

Some studies were identified that support the utility of the ELNEC Core Curriculum proposed teaching strategies in effectively educating nurses or nursing students about the content. Mallory (2003) conducted a quasi-experimental study in which junior baccalaureate nursing students were taught palliative and end-of-life nursing care based upon the ELNEC Core Curriculum. According to the author, the intervention group engaged in the following end-of-life learning activities: study groups; didactic education on palliative care, death and dying, and pain management; discussions; role play; and visits to cadaver labs, funeral homes, and hospice facilities. The control group in the study did not receive any education on palliative and end-of-life nursing care beyond what would normally be included within the baccalaureate curriculum. Students in the intervention group had significant improvements ($p<.05$) in their attitudes toward care of the dying as a result of their education using the various strategies.

Similarly, Thompson (2005) conducted a descriptive study evaluating the impact of an end-of-life elective course on baccalaureate nursing students' comfort in caring for

dying patients. The course was developed from the ELNEC Core Curriculum. Activities implemented within the elective course included guest speakers who lectured on hospice services or pain management, role-playing about ethical dilemmas, and a visitation to a funeral home. Additionally, students read several books and responded to the readings in personal journals and discussion boards.

Jeffers and Ferry (2014) taught an end-of-life elective course to senior nursing students. In the course, based on the ELNEC Core Curriculum, multiple teaching strategies were utilized by the researchers, including: discussion, group activities, readings, films, games, debates, writing assignments, 12 hours of service learning (in such areas as hospice, nursing homes, bereavement education, and neonatal intensive care units), and a final presentation on their service learning experience. The authors explained that students reported learning a lot of information about end-of-life issues and felt they were better able to communicate with dying patients and their families after taking the course. The previous three articles support the effectiveness of the suggested teaching strategies within the ELNEC Core Curriculum.

However, other, innovative strategies not suggested by the ELNEC Core Curriculum authors may also be effective. Kanaskie (2011) used a café design to create an atmosphere in which meaningful conversations could occur. Principles of the café design included setting the context for the conversation, creating an inviting setting, focusing on important questions, allowing all members of the conversation to contribute, being open to differing views and perspectives, listening together, and sharing collective

discoveries. In order to focus the conversations, questions were developed from the ELNEC Core Curriculum. Furthermore, a supplemental document from the ELNEC Core Curriculum, *Making Promises to Patients and Families*, framed the context of the conversation (Kanaskie, 2011). The focus of the conversation was intended to be on important promises made to patients that nurses strive to achieve in their practice. This innovative teaching strategy was well received by nurses completing the activity.

The above literature provides some guidance for teaching strategies to utilize when implementing the ELNEC Core Curriculum in baccalaureate nursing programs. Next, the key findings and gaps from the literature about target participants, timing, content, and teaching strategies will be discussed.

Summary of Process

Several key findings from the *process* evaluation literature will now be discussed. First, regarding target populations, faculty members implementing the ELNEC Core Curriculum need to consider for whom their program is intended. Based on the targeted audience, adaptations may need to be made to ensure the curriculum is implemented appropriately. However, several gaps in the literature about target populations exist. Specifically, only one article demonstrated how the ELNEC Core Curriculum could be adapted for use in a hospice orientation program. More studies are needed demonstrating appropriate adaptations of the ELNEC Core Curriculum for different target populations. Furthermore, no articles identified inappropriate target populations for ELNEC Core

Curriculum training. It is possible that the entire curriculum may not be appropriate for patients or other healthcare providers, but evidence is lacking to make this determination.

Based upon the literature, faculty members may need to carefully consider the order in which the ELNEC Core Curriculum modules are implemented or integrated within a curriculum. Although the ELNEC Core Curriculum has a recommended order for module implementation, evidence supporting this order is lacking. Only one identified article explained that introductory content should precede advanced content to foster learning. Even then, this article did not provide detail as to which modules are introductory and which are advanced. Due to the limited literature on timing, many gaps were identified. Future research is needed in which difficulty/complexity of each module is determined to help create an order for implementation supported by evidence rather than expert opinion. Similarly, research is needed to either support the proposed order of modules or propose a more effective order. Finally, literature is needed within baccalaureate education that indicates which courses are best suited for inclusion of the various ELNEC Core Curriculum modules.

The literature exploring the ELNEC Core Curriculum content supported that, overall, inclusion of the modules within one course or the entire curriculum can be effective. However, the study by Letizia and Jones (2012) suggested that inclusion of any end-of-life content within nursing education may be effective; it may not just be the ELNEC Core Curriculum content that impacts nursing students' learning outcomes related to palliative and end-of-life care. More research is needed to support that the

content within the ELNEC Core Curriculum is comprehensive and the most effective compilation of palliative and end-of-life content. Until that time, the ELNEC Core Curriculum should continue to be considered the optimal palliative and end-of-life content since the extant nursing literature supports the curriculum's effectiveness.

Finally, many teaching strategies have been suggested to teach the ELNEC Core Curriculum. From the literature, it is clear that didactic methods and case studies can be used to teach any of the modules. Specific reading assignments or film observations can also be effective in most of the modules, provided appropriate media are selected. Studies utilizing one or more of these strategies support their effectiveness in teaching palliative and end-of-life care.

Furthermore, strategies can be used to address all three domains of learning. The articles written by the ELNEC Core Curriculum authors primarily propose strategies that address the cognitive and affective domains. Some modules have psychomotor activities suggested, but not all. Contrarily, several of the studies testing ELNEC Core Curriculum teaching strategies focus on psychomotor or experiential learning activities (hospice visits, funeral home visits, etc.), although strategies within the cognitive and affective domains were also utilized.

Several major gaps were identified within the teaching strategy literature. Of the highest priority is the lack of evidence to support each of the proposed ELNEC Core Curriculum teaching strategies. While some strategies were tested in studies, many of the proposed methods have not been assessed through research. Furthermore, many studies

tested multiple strategies at once, without determining their relative and unique effectiveness. Literature analyzing each strategy in isolation is needed to determine which strategies are the most cost effective and/or have the greatest impact on student learning. Finally, Kanaskie (2011) tested an innovative strategy for teaching a portion of the ELNEC Core Curriculum and found it to be effective. Studies should assess other innovative teaching strategies, and, if shown to be effective, these strategies should be incorporated within the ELNEC Core Curriculum.

This dissertation study addressed a few of the identified gaps in the literature. First, the study began to assess sequencing ELNEC Core Curriculum content within a baccalaureate nursing program. In this dissertation study, faculty member survey responses indicated in which courses ELNEC Core Curriculum content was provided in the current baccalaureate nursing program at one School of Nursing. Second, teaching strategies were also preliminarily tested. Although not specifically derived from the ELNEC Core Curriculum modules, faculty member survey responses indicated what teaching strategies were used to teach palliative and end-of-life content in the program being evaluated. However, it was not within the scope of this dissertation study to evaluate the effectiveness of the sequencing of courses and teaching strategies, but rather to describe them.

The final stage of the CIPP Model is *products*, or outcomes from program implementation. Outcomes (products) are based upon the *needs* and *problems* identified

within the *context* evaluation stage of the CIPP Model. Literature related to the products identified for this dissertation study will be explored next.

Product

The variables for the *product* evaluation for this study were considered the learning outcomes for students in each semester of the nursing program. The selection of the outcomes for this dissertation study was guided by the three primary domains of outcomes, according to Bloom's taxonomy, which are: cognitive, psychomotor, and affective (Bastable & Doody, 2008). Matzo, Sherman, Penn, and Ferrell (2003) stated that the ELNEC Core Curriculum is intended to address all three of these domains; therefore, the use of Bloom's taxonomy as a framework for outcome selection was appropriate. As previously mentioned, the majority of teaching strategies proposed within the ELNEC Core Curriculum focus on the cognitive and affective domains of learning. For this dissertation study, outcomes were selected that primarily associated with the cognitive and affective domains, and loosely addressed the psychomotor domain. Within the cognitive domain, *knowledge of palliative and end-of-life care* was assessed. *Perceived competence in providing palliative and end-of-life care* was also assessed. This variable does not clearly fit within one specific domain of learning, but rather can be argued to span all three. Within the affective domain, *attitudes toward death* and *attitudes toward care of the dying* were assessed. However, perceived competence is important to assess, as will be described later. Specific outcomes clearly within the psychomotor

domain were not assessed due to feasibility of outcome measurement with the student sample being studied.

Knowledge of Palliative and End-of-Life Care

For this dissertation study, *knowledge of palliative and end-of-life care* (hereafter knowledge) was measured using the ELNEC Knowledge Assessment Test (ELNEC-KAT) (described in chapter 3). Literature discussing knowledge was limited to studies reporting baccalaureate nursing student knowledge of palliative and end-of-life care as this was a target population for this dissertation study. The identified literature will be discussed in the following order: knowledge in interprofessional settings, knowledge in relation to academic program or progression, knowledge interventions in baccalaureate nursing education, qualitative studies, simulation studies, and interprofessional interventions. The literature will then be summarized and gaps identified.

Interprofessional Knowledge of Palliative and End-of-Life Care

Students in different healthcare professions perceived knowledge in various areas of palliative and end-of-life care as being of more or less importance than others. Nguyen and colleagues (2014) assessed which skills and knowledge medicine (n=43), nursing (n=26), and pharmacy (n=25) students perceived to be necessary for caring for dementia patients at the end of life. Identified areas of needed knowledge were: “knowledge of dementia, medication knowledge, family education, patience, empathy, compassion, understanding, communication, family involvement, respect/patient autonomy, and

quality of life" (Nguyen et al., 2014, p. 5). Of these areas, pharmacy students emphasized medication knowledge significantly more than medical or nursing students (p=.000); medical and nursing students placed significantly more emphasis on patience than pharmacy students (p=.008); medical students cited compassion significantly more often than pharmacy students (p=.037); and medical and nursing students emphasized understanding significantly more than pharmacy students (p=.041). Interestingly, no nursing students cited medication knowledge as an area of emphasis.

In addition to having different areas of perceived importance for knowledge, students in different healthcare professions had differing areas of knowledge expertise. Sadhu, Salins, and Kamath (2010) assessed differences, using chi-square analyses, in medical (n=260), nursing (n=18) and allied health (n=48) student knowledge at Manipal University in India in order to determine baselines from which to develop curricular revisions. Compared to students in medicine (m) and allied health (a), nursing (n) students more frequently correctly acknowledged the right of family to make decisions (n=88.9%, a= 68.8%, m=60.8%, p=.04); more frequently understood that death in palliative care is a normal life process (n=94.4%, a=79.2%, m=70%, p=.044); were better able to differentiate between pain that is acute versus pain requiring palliative care (n=88.3%, a=39.6%, m=53.5%, p=.006); did not believe morphine improves quality of life (lack of knowledge), although the majority of medical and allied health students did believe morphine improves quality of life (n=27.8%, a=60.4%, m=70%, p=.001); and correctly identified nausea and vomiting as a side effect of morphine more often than

students in the medicine or allied health (n=72.2%, a=64.6%, m=42.9%, p=.001). Nursing students identified constipation as a morphine side effect (44.4%), constipation as a non-pain symptom (33.3%), and vomiting as a non-pain symptom (61.1%) less often than medical students (80.8%, p<0.001; 68.1%, p<0.001; and 74.2%, p<0.001, respectively). Nursing students also identified these items less often than allied health students, with the exception of vomiting as a non-pain symptom (50%, 41.7%, 41.7%, respectively). Regarding components of a good death, all professions had high knowledge, but medicine and nursing scored higher than allied health on pain and symptom management (n=88.9%, a=75%, m=91.%%, p=.004), clear decision making (n=94.4%, a=62.5%, m=81.9%, p=.002), and preparation for death (n=77.8%, a=60.4%, m=80.8%, p=.008). Finally, students were assessed on their knowledge of multidisciplinary roles in palliative care, and nursing students were able to more accurately identify medical social workers (n=100%, a=75%, m=87.3%, p=.016) and nurses (n=100%, a=72.9%, m=90%, p=.001) as members of the palliative care team. One area in which students from all professions uniformly lacked knowledge was that morphine does not cause addiction in palliative care (n=11.1%, a=20.8%, m=9.2%, non-significant).

Academic Program and Progression

Unlike differences observed across healthcare professions, different nursing education programs were not shown to result in significant variations in knowledge. Chow and colleagues (2014) conducted a cross-sectional cluster analysis of senior-level

nursing students (n=253) from three different types of nurse training programs in Hong Kong (baccalaureate, higher diploma, and a master's degree program where students enter with a baccalaureate degree in a different profession and first complete nursing training), and found that there were no differences in knowledge of palliative and end-of-life care among the three clusters (primary clustering based on clinical experience).

Another study supported the above finding that knowledge was not impacted by academic program of enrollment, but also indicated that clinical experience did not impact knowledge. In a descriptive study, Al Qadire (2014) assessed knowledge for nursing students (n=220) from five nursing programs in Jordan. Students who had progressed further in their nursing training had significantly higher knowledge than students who has made less progress in their program (p=.005). However, knowledge was not significantly different by school where education was received. Using the Palliative Care Quiz for Nurses (PCQN), a knowledge assessment instrument, the author found that students had low overall knowledge scores (M=8.0, SD=3.1 on a scale from 0-18, significance not provided). Although low overall, students had the highest knowledge of pain and symptom management (M=5.7 out of 13, SD=2.3), and had the lowest knowledge in psychological and spiritual care (M=1.0 out of 3, SD=0.9) and principles of palliative care (M=1.4 out of 4, SD 1.0). Furthermore, of the 20 items on the PCQN, only three items had correct responses for greater than 50% of students. One possible explanation for this overall low knowledge of palliative and end-of-life care was that 63% of students reported having no education about the content in their program.

Findings from another study supported that academic progression did impact knowledge. Wallace et al. (2009) obtained baseline data of sophomore (n=61) and senior (n=50) nursing students' knowledge prior to integrating the ELNEC Core Curriculum into their program. Senior nursing students had significantly higher baseline knowledge scores than sophomore students ($p<.001$). These results suggested that more experience could result in greater knowledge of palliative and end-of-life care.

Knowledge Interventions in Baccalaureate Nursing Education

Experimental and quasi-experimental studies in which education on palliative and end-of-life care was provided have demonstrated increased knowledge in the subject for students. Arber (2001) conducted a quasi-experimental study assessing the impact of a palliative care module, comprising 50 hours of lecture and a one-week hospice experience, on third year nursing students' (n=33) knowledge in the United Kingdom. Overall, students had a significant increase in knowledge from pre-test to post-test on the PCQN ($p<.05$). In the subcategory of principles of palliative care, students significantly improved on one of the four items, specifically the item related to appropriateness of palliative care ($p=.022$). There were no significant improvements in the psychological and spiritual subcategory; however, 70% of the students answered all three questions in this subcategory correctly at pre-test. In the pain management subcategory, students improved in knowledge of adjuvant therapies ($p=.004$), lack of drug addiction with long-term morphine use ($p=.001$), pethidine not effective for chronic pain ($p=.001$), and drugs for dyspnea causing respiratory depression ($p=.022$). At baseline, most students knew

that opioids cause constipation and that condition severity impacts pain treatments, and, as a result, the authors did not find improvement in knowledge in these areas. For the remaining ten items on the PCQN, students did not show significant improvement following the palliative care module.

Brajtman and colleagues (2007) also used the PCQN in a mixed-methods study assessing knowledge outcomes for Canadian nursing students (n=58) graduating from the baccalaureate nursing program. Although all aspects of palliative care on the PCQN were integrated into the curriculum at some point, students only had moderate knowledge at completion of the program (M=12.29 out of 20). Students scored highest on knowledge of adjuvant therapy (95% correct) and lowest in knowledge of morphine as the standard treatment for pain (35% correct). Subsequent qualitative analysis of student comments revealed a desire for more information on palliative and end-of-life care and integration of the content earlier in the program.

Two studies reported the impact of a companion program on nursing students' knowledge, as measured by the PCQN. Kwekkeboom, Vahl, and Eland (2005) described a semester-long elective program in which students received orientation to palliative care and then performed visits with hospice patients or conducted bereavement telephone calls. Additional hospice experiences, such as attending hospice support groups or oncology unit orientation courses, were optional within the program. In their first study assessing the program, Kwekkeboom et al. (2005) reported significantly higher knowledge scores ($p<.05$) for students in the companion program (n=19) versus the

control group (n=15). In their second study, using the same intervention in a different sampling of students, Kwekkeboom, Vahl, and Eland (2006) did not find significantly different improvements in knowledge scores between companions (n=32) and controls (n=20). The authors reported issues with internal consistency of the PCQN within the second study which prevented a total knowledge score from being calculated.

Qualitative Studies

Qualitative studies revealed subject areas in which educational interventions could impact knowledge. Woncha Loerzel and Conner (2014) taught an online death and dying elective for nursing students and assessed knowledge by conducting a qualitative analysis of the students' final papers. Of the 36 students enrolled, 25 were in the associates to bachelor's degree program, 10 were in the baccalaureate program, and 1 was in the master's program. Deductive analysis revealed that students initially had many fears in caring for dying patients due to a lack of knowledge in areas such as communication, skills, and cultural competence. Analysis further revealed that, following the course, students reported gaining increased knowledge in multiple areas, including: cultural competence, communication, symptom management, the nurses' role, and providing care for the patient's family.

Similarly, Price, Dornan, and Quail (2013) used qualitative methods to analyze student reflections following a module on pediatric palliative care and a visit to a children's hospice for nursing students (n=22) in their second year of training at a university in Northern Ireland. Following their visit to the hospice, students reported

having an increased awareness of available hospice services and patient conditions qualifying for palliative care. Students further reported seeing a connection between the lecture content and practice as a result of the intervention.

Unlike the previous studies in which knowledge was increased by education, Adesina and colleagues (2014) found that knowledge was impacted by previous experiences and not education. In their qualitative study assessing third-year Australian nursing students'(n=87) attitudes, knowledge, and education about end-of-life care, the authors found that most students reported obtaining their knowledge of death and dying from personal experiences or previous professional healthcare experiences outside of their formal nursing education; little of their knowledge was gained from their education. The authors explained this finding may be attributed to the lack of palliative and end-of-life content formally taught in the curriculum as a core subject.

The lack of formal education in palliative and end-of-life care limited student knowledge development in another study. Watts (2014) conducted a qualitative descriptive study assessing Welsh graduating nursing students' (n=11) knowledge of palliative and end-of-life care and found that, although they had a broad knowledge base, students' depth of understanding was superficial and limited primarily to the dying phase in palliative care. Furthermore, the author found that some students had knowledge gains associated with personal experiences whereas other students' gains were associated with their education.

Simulations and Knowledge of Palliative and End-of-Life Care

Simulations about palliative and end-of-life care have been shown in the literature to increase students' knowledge. In their literature review of palliative and end-of-life care simulations, Gillan, Jeong, and van der Riet (2014) found that all applicable studies reported increased knowledge following simulations on the subject. Additional studies support this conclusion. Efstathiou and Walker (2013) developed three interprofessional, communication-focused end-of-life simulations for medical (n=14), nursing (n=18), pharmacy (n=7), and physiotherapy (n=11) students. Students from all health professions reported significant increases in knowledge of how to manage challenging conversations at the end of life (p=.000). Fluharty et al. (2012) conducted a simulation with nursing students from four academic institutions (one large, public; two smaller, private universities; one community college). Participants were enrolled in associate's degree (n=87), baccalaureate (n=224), accelerated baccalaureate (n=43), or unspecified (n=43) nursing programs. Knowledge significantly improved from pre-test to post-test for the entire sample (p=.000), for each program of enrollment (p=.000), and for both male and female students (p=.000). Moreland, Lemieux, and Myers (2012) conducted a mixed methods quasi-experimental study testing the impact of an end-of-life simulation of a patient with terminal lung cancer on 14 baccalaureate nursing students' knowledge and found statistically significant improvements from pre-test to post-test (p=.003).

Interprofessional Education and Knowledge of Palliative and End-of-Life Care

Interprofessional interventions also improved healthcare professionals' knowledge. Ersek and colleagues (2010) explained that the University of Pennsylvania and the University of Botswana conducted an interprofessional palliative care workshop open to clinicians, faculty members, and students from the following professions: nursing (n=37), medicine (n=2), pharmacy (n=1), social work (n=6), and chaplaincy (n=1). Knowledge of palliative and end-of-life care, assessed at pre-test and post-test using the Brief Test of Palliative Care Knowledge, increased significantly, albeit modestly (from M=14.4, SD=3.3 to M=16.7, SD=1.5, $p<.001$),. Korzeniewska-Eksterowicz and colleagues (2013) pilot tested a pediatric palliative care program with Polish final year family medicine (n=320) and third year nursing (n=55) students in which all students completed 5 hours of lectures and medical students only also completed five hours of workshops. Nursing students (median=26.7, 25%-75%=13.3-46.7) had significantly lower scores at baseline on the pediatric palliative care knowledge questionnaire containing nine questions than medical students (median=43.35, 25%-7%=40-53.5, $p<.001$). Both groups showed significant improvement in knowledge of pediatric palliative care following the program, with nursing students (median=80, 25%-75%=66.7-80) having larger gains than medical students (median=80, 25%-75%=73.3-100, $p<.001$).

Additional nursing literature suggested that education on palliative and end-of-life care can increase student knowledge, although the evidence to support these

assertions was weak or absent. DiBartolo and Seldomridge (2009) discussed how their use of films allowed second-semester junior nursing students to increased their knowledge of the stages of grief and how people respond to end-of-life situations. Students wrote papers after watching one of two films, *Tuesdays with Morrie* or *Whose Life is it Anyway?* Following the film, students identified the stages of grief and explored their emotions and responses to the film. The majority of students earned a B on the paper, loosely indicating adequate knowledge; no other assessments of knowledge were reported. Jeffers and Ferry (2014) created a three-hour elective course for senior nursing students in which they were taught about end-of-life care. Students were evaluated based on papers, completion of 12 hours of a service-learning experience, and a presentation of their service-learning experience. The authors asserted that the course increased student knowledge and awareness of palliative and end-of-life nursing care, although no evidence was provided to support this assertion.

Summary of Knowledge of Palliative and End-of-Life Care

Baseline assessments of knowledge of palliative and end-of-life care demonstrated that, without formal education on the subject, nursing students lack the necessary knowledge in many areas of palliative and end-of-life care, especially psychological, spiritual, and basic principles of palliative care. Students demonstrated fears and incorrect assumptions about aspects of palliative care prior to receiving education. Without formal education, students are likely to enter practice with this incorrect knowledge, which in turn may result in poor or suboptimal patient outcomes

Education on palliative and end-of-life care has been shown to improve students' knowledge in both qualitative and quantitative studies, although the degree of improvement varies. Knowledge gains are seen globally, including in Poland, Hong Kong, Jordan, India, the United Kingdom, Northern Ireland, Canada, and the United States. Simulations were common educational interventions that resulted in improvement of students' knowledge of palliative and end-of-life care. Additionally, interprofessional interventions improved nurses', as well as other health professionals', knowledge of palliative and end-of-life care. However, as demonstrated in the reviewed literature, different professions have different areas of knowledge expertise prior to receiving palliative and end-of-life care education; therefore, knowledge gains in the different content areas will vary by profession. Also, future studies assessing interprofessional education need to attempt to have equal representation of health professions, since the studies reviewed had larger samples of medical students than students from other professions, including nursing.

Although education seemed to improve overall knowledge of palliative and end-of-life care in most cases, but not all, deficiencies in some knowledge areas were more prevalent than in others, both at baseline and post-test. Overall, students seemed to have the best knowledge in areas of pain and symptom management, even though some areas still require further exploration and education. In particular, nursing students had inconsistent knowledge regarding various aspects of morphine as it pertains to palliative care. Other content areas in which knowledge of palliative and end-of-life care remained

insufficient were psychological and spiritual issues as well as principles of palliative care. Furthermore, while most studies reported knowledge gains due to formal education, two studies (Adesina et al., 2014; Watts, 2014) found that students' knowledge of palliative and end-of-life care was obtained from personal experience, rather than formal education on the content.

Another area of inconsistency was the impact of clinical experience on knowledge of palliative and end-of-life care. Chow et al. (2014) did not find an impact based on clinical experience, whereas Al Qadire (2014) and Wallace et al. (2009) did find that students with more years of training had better knowledge. Furthermore, the literature supported that the type of nursing program of enrollment did not impact knowledge of palliative and end-of-life care.

The Palliative Care Quiz for Nurse was the most commonly used instrument to assess knowledge of palliative and end-of-life care (Al Qadire, 2014; Arber, 2001; Brajtman et al., 2007; Kwekkeboom et al., 2005; Kwekkeboom et al., 2006). All but Kwekkeboom et al. (2006) found this instrument to be reliable for assessing knowledge of palliative and end-of-life care.

From the empirical literature reviewed, several gaps are identified. First, there was conflicting evidence regarding the impact of clinical experience and progress in a nursing program on knowledge of palliative and end-of-life care. Additional research with larger sample sizes is needed to further explore the relationship between these two variables.

Similarly, future studies assessing knowledge of palliative and end-of-life care from interprofessional interventions need to attempt to recruit equal sample sizes from all healthcare professions represented in the study. Statistical analyses will be biased when using greatly different sample sizes from each profession; therefore additional steps will be needed to recruit subjects from professions that are inadequately represented.

Only one study, Brajtman et al. (2007) attempted to analyze changes in knowledge of palliative and end-of-life care associated with an entire nursing curriculum. All other intervention studies assessed knowledge changes following one course or experience related to palliative and end-of-life care. Additionally, all of the palliative and end-of-life courses discussed in the literature were elective courses. It is possible that students enrolled in these elective courses have a unique interest in palliative and end-of-life care; therefore, the results from these samples may be different than from samples of all students enrolled in a given nursing program. Future research needs to assess the impact of the entire curriculum or required palliative care courses on knowledge of palliative and end-of-life care for all students. This dissertation study addressed the specific gap in the literature identifying the lack of research analyzing the impact of an entire baccalaureate curriculum on knowledge of palliative and end-of-life care.

The second *product* assessed in this dissertation study was *perceived competence in providing palliative and end-of-life care*. Literature exploring perceived competence will be discussed next.

Perceived Competence in Providing Palliative and End-of-Life

For this dissertation study, *perceived competence in providing palliative and end-of-life care* (hereafter perceived competence) was assessed using the Perceived Competence in Meeting ELNEC Standards (PC-ELNEC) instrument (described in chapter 3). Due to the limited number of citations in baccalaureate nursing education for this variable, literature about other nursing education programs and practicing nurses was explored. Empirical literature exploring the concept of perceived competence within nursing education will be presented first, following by literature from explorations of perceived competence in nursing practice.

Perceived Competence within Students

In descriptive studies, students tended to report high levels of perceived competence in providing palliative and end-of-life care. Adriaansen and van Achterberg (2004) created an instrument to assess perceived competence, and tested the instrument with Canadian and Dutch licensed practical nurses (LPNs) (n=54), registered nurses (n=83), and baccalaureate nursing students in their fourth year of training (n=24). For eight items, primarily focused on cooperation and communication, 80% or more of respondents reported having high perceived competence, although the results were not further divided by group, so unique student responses rates were not able to be determined. Overall, there were no statistically significant differences between groups on their perceived competence once these eight items were removed. However, individual item analysis revealed the following: students and nurses scored significantly higher that

LPNs on “offer complementary care” (p=.004); students scored higher than both groups of nurses on “information about final life phase” (p=.000); LPNs and students scored higher than nurses on “discuss desire for euthanasia” (p=.000); and students scored higher than LPNs on advise about oral care (p=.017) (p. 113).

Adriaansen and van Achterberg (2004) reported that students and nurses were expected to have higher perceived competence than LPNs, due to their respective training, but students should have been lower than nurses due to their limited experiences. This expectation did not hold for all items, as demonstrated above. From their findings, the authors cautioned researchers using the instrument in future studies to assess the effect of education on perceived competence. The authors asserted that, following education about palliative care, perceived competence may decrease as students become more aware of their actual limitations due to limited experience.

De Witt Jansen et al. (2013) assessed perceived competence in providing palliative care to patients with dementia in final year medical and nursing students in Northern Ireland (n=119 medical, n=65 nursing) and the United States (n=39 medical, n=22 nursing). Medical students reported significantly higher perceived competence in biomedical care areas such as giving bad news, discussing end-of-life treatment options, and discussing hospice as compared to nursing students ($p<.05$). However, nursing students reported significantly higher perceived competence in psychosocial areas, specifically discussing religious and spiritual aspects of death and dying as compared to medical students ($p<.05$). Compared to medical students from both countries and nursing

students from Northern Ireland, nursing students in the United States reported significantly higher perceived competence in expressing empathy, eliciting family's goals of end-of-life care, and managing pain ($p<.05$).

Clinical experience was shown to influence a student's perceived competence. Chow and colleagues (2014) conducted a cross-sectional cluster analysis of senior-level nursing students (n=253) from three different types of nurse training programs (baccalaureate, higher diploma, and master's degree where students enter with a baccalaureate degree in a different profession and first complete nursing training) in Hong Kong, and found that clinical experience was the only student characteristic that influenced perceived competence, with clinical experience in providing end-of-life care resulting in increased perceived competence.

However, not all literature found students to have high perceived competence in providing palliative and end-of-life care. In their survey of third-year baccalaureate nursing students (n=87) in Australia, Adesina and colleagues (2014) reported that 63% of the respondents had low perceived competence in providing palliative and end-of-life care.

Perceived competence has also been assessed following educational interventions. Findings from multiple studies demonstrated that education on palliative and end-of-life care improved nursing students' perceived competence in providing palliative and end-of-life care. Efstathiou and Walker (2013) developed three interprofessional, communication-focused end-of-life simulations for medical (n=14), nursing (n=18),

pharmacy (n=7), and physiotherapy (n=11) students. Although statistical significance was not reported, students from all health professions reported increased perceived competence in having challenging conversations with patients at the end-of-life.

Similarly, Erickson, Blackhall, Brashers, and Varhegyi (2014) conducted a pretest-posttest assessment of changes to medical (n=118) and nursing (n=97) students' perceived competence from a 90-minute workshop on communication skills and structure in end-of-life care. Following the workshop, nursing student perceived competence improved significantly ($p<.001$) while medical student perceived competence did not. Likewise, Moreland, Lemieux, and Myers (2012) conducted a mixed-methods quasi-experimental study testing the impact of an end-of-life simulation on undergraduate nursing students' (n=14) outcomes and found significant improvements in perceived competence after the simulation ($p=.05$).

Weissman (2011) used a quasi-experimental design to explore the effect of teaching the ELNEC Core Curriculum Communication module to first-year associate degree nursing students. Both the intervention (n=9) and control groups (n=8) had improved perceived competence in communicating with dying patients, but the control group demonstrated less improvement than was seen in the intervention group. Weissman explained that the lack of a significant difference between the groups' perceived competence may have been due to an increased understanding of the complexities of end-of-life communication in the intervention group, which decreased perceived competence,

as compared to the control group's relative lack of understanding, which may have resulted in over-estimated perceived competence.

One researcher explored actual, as opposed to perceived, psychomotor outcomes by assessing competence rather than perceived competence. Pullis (2013) integrated hospice experiences into a community health nursing clinical course to help develop student competence in end-of-life care across the lifespan. Pullis reported that ten students who participated in the course were able to demonstrate increased psychomotor skills in providing end-of-life care as they worked with the Vietnamese community in Houston to increase their knowledge of hospice. However, no data was presented to support Pullis' conclusions of students' improved competence.

Perceived Competence within Nurses

Additional literature regarding perceived competence presented some contrasting findings, specifically with regard to the impact of palliative and end-of-life care education on changes in perceived competence for practicing nurses.

White and Coyne (2011) asked Oncology Nursing Society members (n=714) to rank end-of-life care core competencies in terms of importance. Of the respondents, 39% had baccalaureate and 30% had graduate education, 63% had received end-of-life care education, and 46% completed 4 or more hours of end-of-life care education. Ninety-nine percent stated that end-of-life care education was important and that end-of-life care was part of their professional practice. End-of-life care competencies were ranked as follows, from highest priority to lowest: symptom management, communication about death and

dying, what comprises palliative care, pain control techniques, dealing with your own feelings, what comprises hospice, recognizing impending death, advanced directives, ethical issues, dealing with angry patients and families, legal issues, and religious and cultural perspectives.

Brazil, Brink, Kaasalainen, Kelly, and McAiney (2012) assessed knowledge and perceived competence for staff nurses (characteristics not provided) in four Canadian long term care centers and found that nurses had high perceived competence in patient management, communication, and multidisciplinary teamwork. Montagnini, Smith, and Balistrieri (2012) assessed perceived competence in providing end-of-life care of intensive care unit providers. Of the 93 completed surveys, 40.9% came from nurses and 26.9% from physicians, and 69.9% of respondents had had previous end-of-life care education. Overall, healthcare providers reported highest perceived competence in patient and family support, spiritual support, and symptom management and the lowest perceived competence in continuity of care. More years of practice was associated with higher perceived competence in emotionally supporting patients and families ($p=.05$). Nurses reported significantly lower competence in areas of skills with end-of-life care, team behaviors, and communication compared to physicians' self-ratings ($p<.0001$).

Nguyen, Yates, and Osborne (2014) assessed palliative care nursing perceived competence of Vietnamese oncology nurses (n=251), 35.5% of whom had received palliative care education and 44.3% of whom reported that ≥51% of their work was related to caring for dying patients. For 27/34 items, nurses reported moderate to strong

perceived competence, and, for 7/34 items (two pain management, two social care, three spiritual care), nurses reported low perceived competence.

Landmark, Wahl, and Bøhler (2004) assessed changes in Norwegian nurses' (n=25) perceived competence associated with completing a two-year postgraduate course in palliative care. The nurses in the course had quite a lot of experience, with 48% reporting >15 years of nursing experience and 60% having personal experience with terminal illness and dying. Nurses' reported significantly improved competence from beginning to end of the program (p=0.000), and significant improvements were observed as early as six months into the program (significance not reported).

The above studies demonstrated that nurses have varying areas of high and low perceived competence in providing palliative and end-of-life care (Brazil et al., 2012; Montagnini et al., 2012; Nguyen et al., 2014; White and Coyne, 2011), and can have improved perceived competence following palliative care education (Landmark, Wahl, and Bøhler, 2004). However, other studies found that nurses reported overall low perceived competence or had decreased perceived competence in providing palliative care with increasing years of experience. This finding was reported by McCourt, Power, and Glackin (2013) who conducted a literature review of 10 studies assessing general nurses' experiences in providing palliative and end-of-life care and identified a major theme of nurses having low levels of perceived competence in providing palliative and end-of-life care. Pfister and colleagues (2013) assessed perceived competence of nurses (n=130) in five nursing homes in western Germany and found lower reported perceived

competence in providing palliative care in nurses with more experience ($p=.007$) as well as correlations between low perceived competence scores and older nurses ($p<.02$) and more work experience ($p<.001$). The authors asserted that these findings may be due to an inability of nurses with less experience to accurately assess their abilities, the challenges associated with palliative care, and possible higher expectations of older nurses.

Summary of Perceived Competence

The literature above presented some consistencies and inconsistencies regarding nurses and nursing students' perceived competence in providing palliative and end-of-life care. Within nursing student populations, perceived competence could be improved by providing education about palliative and end-of-life topics, particularly communication. Furthermore, different strategies to teach these topics, including interprofessional strategies, were shown to enhance perceived competence in communicating with patients at the end-of-life. These trends seem to be similar across different countries as well, although nursing students in the United States seemed to report higher perceived competence than similar students in Canada, Northern Ireland, and the Netherlands. What remains unclear from the literature is whether or not the perceive competence reported by students is a true estimation of ability or instead demonstrates an over-inflation of perceived ability due to limited experience with the actual provision of palliative and end-of-life care.

Literature exploring perceived competence in practicing nurses presented some inconsistencies that need to be considered. Specifically, some studies found that nurses with more experience had higher perceived competence, while other studies found that more experience was associated with lower perceived competence in providing palliative and end-of-life care. Educational interventions helped improve perceived competence for nurses, regardless of the years of experience nurses reported. However, the topic of the education seemed to be important as education alone did not promote perceived competence in all areas of palliative and end-of-life care. For example, studies focused on education about communication impacted perceived competence in communicating with patients at the end-of-life, but did not necessarily influence other aspects of palliative and end-of-life care.

Areas of palliative and end-of-life care that were considered highly important by nurses were shown in some studies to be areas of low perceived competence, whereas other studies have demonstrated that nurses had high perceived competence in areas of palliative and end-of-life care that were considered less important. For example, spiritual issues have been ranked low in terms of importance, yet some studies found that nurses had high perceived competence in addressing spiritual issues whereas other studies found spiritual issues to be areas of deficiencies. Physical needs (symptom and pain management) seem to be ranked as highly important, and some nurses reported high perceived competence in this area, while others report low perceived competence, especially in comparison to physician perceived competence. However, what seems to be

consistent across the empirical literature reviewed is that both student nurses and practicing nurses perceive themselves as highly competent in addressing psychosocial needs for patients and their families, particularly in addressing those needs through communication.

From the empirical literature reviewed, several gaps were identified. First, the literature suggested that nurses and nursing students had higher perceived competence in addressing psychosocial patient needs in palliative care while also having lower perceived competence in addressing physical needs, as compared to their counterparts in medicine. Evidence is lacking that explains this discrepancy in perceived competence. Strategies to improve perceived competence of nurses and nursing students in addressing physical needs for patients receiving palliative care are also lacking.

The empirical literature also demonstrated inconsistencies between nurses' and nursing students' experience and perceived competence. Some studies reported that nurses with more experience had higher perceived competence that newer nurses or nursing students; whereas other studies report that newer nurses or nursing students had higher perceived competence in providing palliative and end-of-life care than more experienced or older nurses. More research is needed to further explore these conflicting findings.

Finally, education about palliative and end-of-life care topics has been shown to improve perceived competence in the area for which the education is focused. However, more research needs to be conducted to determine which educational strategies are best

suited for different topics in palliative and end-of-life care education. For example, workshops and simulations were both shown to improve perceived competence in communicating with dying patients, but literature is needed that compares these strategies to determine which is the most effective, cost-efficient, and time-saving.

This dissertation study addressed the gap in the literature regarding inconsistencies between students' experience and reported perceived competence, by assessing trends in perceived competence across a curriculum. The third and fourth *product* evaluation variables assessed for this dissertation study were attitudes, *particularly attitudes toward death and toward care of the dying*. Literature exploring these attitudes will be discussed next.

Attitudes toward Death and toward Care of the Dying

For this dissertation study, attitudes toward death and toward care of the dying encompassed two key affective areas that may be influenced by curricular content on palliative and end-of-life care. As a result, literature in which either of these attitudes was studied in undergraduate students (baccalaureate or associates degree programs) will be discussed. Practicing nurses, associate to bachelor's degree students, and graduate students have likely had different professional experiences with death, and, as a result, most likely have different attitudes about death and care of the dying; therefore, literature from these populations is excluded from the following discussion.

Next, literature assessing undergraduate nursing students' attitudes toward death will be discussed. Then, literature assessing baccalaureate nursing students' attitudes

toward care of the dying will be discussed. Finally, key findings from the literature will be summarized and gaps regarding these attitudes will be identified.

Nursing Students' Attitudes Toward Death

Undergraduate nursing students' attitudes toward death were frequently assessed in the literature using the Death Attitude Profile-Revised, or DAP-R (Wong, Reker, & Gesser, 1994). Five dimensions of attitudes toward death are assessed in this instrument: fear of death/dying, death avoidance, approach acceptance, escape acceptance, and neutral acceptance. Fear of death refers to specific and conscious anxiety/concern associated with death. Death avoidance refers to the use of defense mechanisms to avoid consciously thinking about death. In approach acceptance, an individual views death positively as a happy afterlife. In escape acceptance, a person views death as a relief from life's sufferings; therefore, death is preferable to life. In neutral acceptance, a person accepts death as a part of life while neither fearing nor welcoming it. The following articles that will be discussed represent studies in which the DAP-R was used to assess undergraduate nursing students' anxiety toward death. Experimental or quasi-experimental studies in which the DAP-R was used to assess nursing student attitudes toward death will be discussed first, followed by a discussion of descriptive studies.

First, Dobbins (2011) conducted an experimental study assessing the impact of implementing the entire ELNEC Core Curriculum in an elective course on associate degree nursing students' attitudes toward death and toward care of the dying. The authors discussed the results from two separate studies implementing the same intervention. In

the first study, the authors compared results on the DAP-R between 12 students in the intervention group (ELNEC Core Curriculum) and 25 students in the control group (standard curriculum). The intervention group had a significant decrease in fear of death from pre-test to post-test ($p<.05$). There was also a significant difference between groups on the fear of death subscale at post-test, with the control group reporting more fear ($p<.05$). Significant differences were not noted on any other subscale. In the second study, results were compared between 16 students in the intervention group and 22 students in the control group.

Unlike the first study in which only the intervention group received education based upon the ELNEC Core Curriculum, students in the control group of the second study by Dobbins (2011) completed one activity in which end-of-life care was taught. In this study, students in the control group had significantly reduced fear of death ($p<.05$), but the intervention group did not. The intervention group significantly reduced their death avoidance and improved their approach acceptance and escape acceptance from pre-test to post-test ($p<.05$). There were significant differences between groups on the approach acceptance and escape acceptance post-test results ($p<.05$), with the intervention group reporting higher levels of acceptance. These results suggested that education on palliative and end-of-life care can positively impact nursing students' attitudes toward death and toward care of the dying, with more education possibly resulting in more improvement.

In a quasi-experimental study, Conner and colleagues (2014) educated baccalaureate nursing students (n=58) in a death and dying elective course and compared their learning outcomes to students in a control group (n=65) who did not receive palliative and end-of-life care education. The authors assessed attitudes toward death using the DAP-R. Significant differences were noted in the intervention group on the death avoidance subscale (decreased) and in the control group on the escape acceptance subscale (increased) from pre-test and post-test ($p<.05$). The intervention and control groups were significantly different on the DAP-R death avoidance subscale at post-test ($p<.05$), with the control group displaying higher death avoidance.

Other studies used the DAP-R as a means of describing student anxiety toward death. In their study using the DAP-R, Iranmanesh and colleagues (2008) compared attitudes toward death in nursing students from two states in south-east Iran, Kerman (n=60) and Bam (n=50). Results indicated that students in Bam had less fear of death ($p<.01$), less uncertainty about what happens after death ($p<.001$), less concern about what happens after death ($p<.001$), and less fear that death means an end to everything ($p<.001$). Students in Kerman more often viewed death as a means to the afterlife ($p<.001$), as a passage to eternal life ($p<.001$), and as a release for the soul ($p<.001$). Students in Bam more often viewed death as an escape from suffering life ($p<.01$), an escape from a terrible world ($p<.001$), and a relief from suffering ($p<.001$). One possible explanation for these differences was that students in Bam had experienced a catastrophic

earthquake, whereas students in Kerman did not. This different experience may have accounted for the more negative attitudes toward death for students from Bam.

In a cross-sectional survey study using the DAP-R, Kumar, Chris, Pais, Sisodia, and Kumar (2014) assessed differences in first-year nursing students' (n=52) attitudes toward death based on characteristic variables. Students were significantly different on death avoidance ($p<.05$), with younger students being more likely to avoid death. Christian students displayed more escape avoidance than Hindu students ($p<.05$). Students who had been exposed to death had significantly higher DAP-R total scores, were more death avoidant, and had more neutral acceptance than students who had not been exposed to death ($p<.05$). Significant differences were not observed based upon caring for dying patients or death of a family member.

Not all studies assessing attitudes toward death used the DAP-R. Other instruments have been used in both quasi-experimental and descriptive studies. Most of these instruments assessed anxiety about death, rather than assessing general attitudes toward death. Smith-Stoner and colleagues (2011) compared concerns about dying for nursing students in California (n=142), Norway (n=106), and Sweden (n=141) who were beginning their nursing education. The authors used the Concerns About Dying (CAD) scale to assess attitudes, which has the following three subscales: general, spiritual, patient-centered. Significant differences were found between groups on all three subscales of the instrument ($p<.0001$). In the subscale assessing general concerns about death, students in Sweden had the lowest level of concern ($M=3.07$, $SD=0.90$) and

students in Norway had the highest level of concern (M=3.69, SD=0.86). On the spirituality subscale, students in California had the least concern (M=2.06, SD=0.83) and students in Sweden had the most concern (M=3.18, SD=0.95). On the subscale related to patient care, students in Sweden had the lowest level of concern (M=2.57, SD=1.02) and students in California had the highest level of concern (M=3.21, SD=0.96).

One additional study used multiple instruments to assess attitudes toward death. Aradilla-Herrero, Tomás-Sábado, and Gómez-Benito (2012) conducted a cross-sectional, correlational study using the Collet-Lester Fear of Death Scale, Death Anxiety Inventory-Revised, Death Anxiety Scale, Death Depression Scale-Revised, Death Obsession Scale, and Trait Meta-Mood Scale to assess the relationship between attitudes toward death and perceived emotional intelligence in baccalaureate nursing students in Barcelona, Spain (n=243) in any of the three years of the program. Students who more frequently focused their attention on their attitudes about death tended to have higher fear of death whereas students who are able to better understand and manage their emotions had less anxiety or fear associated with death. The authors reported that fear of others' deaths decreased in students as they advance through their education.

In a different study, Chen and colleagues (2006) compared death anxiety among experienced nursing students (n=53), inexperienced nursing students (n=49), and non-nursing students (n=50). The experienced students had some exposure to death-related situations whereas the inexperienced and non-nursing students had little to no clinical experience, not limited to end-of-life situations. The authors used the Multidimensional

Fear of Death Scale (MFODS) to assess death anxiety in the sample. The MFODS assessed fear of the dying process, fear of the dead, fear of being destroyed, fear for significant others, fear of the unknown, fear of conscious death, fear for the body after death, and fear of premature death. Chen and colleagues reported that controlling for the significant group differences (ANCOVAs) revealed that students in the experienced group had higher fear of the dying process and more fear of the unknown ($p<.05$). Significant negative correlations ($p<.05$) were identified between the following: age and fear of the dead, fear of begin destroyed, fear for significant others, fear of conscious death, fear of the body after death, and fear of premature death; religiosity and fear of being destroyed; and seeing a person die and fear of the dead, fear of being destroyed, fear for significant others, fear of conscious death, and fear of premature death ($p<.05$). Positive correlations ($p<.05$) were identified between the following: religiosity and fear of the unknown; death of someone close and fear of being destroyed, fear of conscious death, and fear for the body after death; seeing a person die and fear of the unknown; and seeing a violent death and fear of the dead and fear of conscious death. Imminent personal death did not correlate with any death fears.

One study used qualitative methods to assess students' attitudes toward death. Liu and colleagues (2011) conducted a workshop with 20 Taiwanese nursing students (11 first-year and 9 second-year) in which the students explored aspects of their own death. Using an interpretive descriptive qualitative design, the authors analyzed field notes, students' journals, and workshop evaluations. Six main themes were identified as

outcomes from attending the workshop: surprise that their lives were ending too soon (during an activity in which students had to write a good-bye letter to loved ones after just learning they only had 30 minutes to live), reluctance to let go of their lives and families, gratitude for their experiences, cherishing the present, setting goals for their professional development (during an activity in which students had to write their epitaph), and pondering the value of life.

In addition to assessing baccalaureate nursing students' attitudes toward death, this dissertation study also assessed attitudes toward care of the dying. Literature will be discussed next in which attitudes toward care of the dying was assessed in undergraduate nursing students.

Nursing Students' Attitudes Toward Care of the Dying

Similar to the DAP-R, one instrument is frequently used in end-of-life care education research to assess students' attitudes toward care of the dying. The instrument is the Frommelt Attitudes Toward Care of the Dying scale (FATCOD). Experimental and quasi-experimental studies in which this instrument was used will first be described, followed by a discussion of descriptive studies using the instrument.

First, Bailey and Hewison (2014) assessed the impact of an educational end-of-life workshop on third-year baccalaureate nursing students' (n=21) attitudes toward care of the dying using the FATCOD. During the one-day workshop, students worked in groups to complete case studies about end-of-life situations, including professional, ethical, and practice-based issues. The workshop included discussions and sharing of the

case studies, facilitated by faculty members with end-of-life expertise. The authors reported that students had a significant improvement in attitudes toward care of the dying following the workshop at a moderate effect size ($p<.01$, $\eta^2=0.68$). They noted that the highest post-test FATCOD score was 133/150, indicating further room for improvement for this sample of students.

Second, Barrere and colleagues (2008) integrated the ELNEC Core Curriculum into their baccalaureate nursing program and assessed attitudes toward care of the dying, using the FATCOD, for traditional BSN (n=39) and accelerated BSN (n=34) students. The authors reported an overall significant improvement in attitudes in students after completing the baccalaureate program (p=.000).

Third, Brajtman and colleagues (2007) used the FATCOD in a mixed-methods study assessing attitude toward care of the dying for Canadian nursing students (n=58) graduating from the baccalaureate program. Students had positive reported attitudes toward care of the dying at the end of the program (M=129.12 out of possible 150). The highest mean was on the question asking if caring for dying patients is worthwhile (M=4.8 out of possible 5). The lowest mean was on the question asking if students would be uncomfortable talking with patients about their death (M=2.99 out of possible 5).

Fourth, Conner and colleagues (2014) educated undergraduate nursing students (n=58) in a death and dying elective course and compared their learning outcomes to students in a control group (n=65) who did not receive palliative and end-of-life care education. The intervention group's attitudes toward care of the dying on the FATCOD

significantly improved ($p<.0001$, effect size=0.58) whereas the control group's did not. There were also significant differences on the FATCOD between the groups at post-test and on the difference scores ($p<.05$). After controlling for group differences in previous education on death and dying and previous experience with loss (significantly different characteristic variables, $p<.05$) and the pre-test FATCOD scores, the post-test FATCOD scores remained significantly different between groups ($p=.0011$, effect size=0.61). Finally, the authors reported that death avoidance and approach acceptance scores on the DAP-R significantly predicted post-test FATCOD scores ($p<.05$), accounting for 21% of the variance of the post-test result.

Fifth, Dobbins (2011) conducted an experimental study assessing the impact of implementing the entire ELNEC Core Curriculum on student attitudes toward care of the dying within an associate's degree nursing elective course. The author discussed the results from two studies implementing the same intervention. In the first study, the author compared results on the FATCOD between 12 students in the intervention group and 25 students in the control group. The intervention group had a significant improvement in attitudes toward care of the dying from pre-test to post-test ($p<.05$). The control group had slightly worsening attitudes, but the results were not significant. There was also a significant difference between groups on the FATCOD at post-test ($p<.05$).

In the second study by Dobbins (2011), results were compared between 16 students in the intervention group and 22 students in the control group. In this study, students in the intervention group improved significantly on the FATCOD ($p<.05$), but

there was not a significant difference between the control and intervention groups at post-test. Students in the control group of the second study did receive some palliative and end-of-life care education, possibly accounting for the lack of a significant difference at post-test.

Sixth, Mallory (2003) conducted a quasi-experimental study in which junior level baccalaureate nursing students (n=41) were taught palliative and end-of-life nursing care based upon the ELNEC Core Curriculum. A control group of 54 students at another similar nursing school was used as these students were not taught based on the ELNEC Core Curriculum. The FATCOD results indicated that students in the intervention group significantly improved from pre-test to post-test ($p<.001$) whereas the control group did not significantly improve. A significant difference was also noted between groups at post-test when controlling for pre-test scores ($p<.05$), with students in the intervention group having better attitudes toward care of the dying.

Seventh, Weissman (2011) conducted a quasi-experimental study testing the effect of the ELNEC Core Curriculum communication module on first-year associate degree nursing students' attitudes toward care of the dying using the FATCOD. Neither group had a significant increase in attitudes, but the authors noted that the control group had a mean change of 0.63 points (SD=7.27), whereas the intervention group had a mean change of 6 points (SD=7.01).

Some studies used the FATCOD to describe attitudes toward care of the dying in a sample of nursing students, rather than using the instrument to assess outcomes of an

educational intervention. Iranmanesh and colleagues (2010) compared Iranian (n=110) and Swedish (n=113) nursing students' attitudes toward care of the dying using the FATCOD. The students were all enrolled in their fourth, fifth, or sixth semester of nursing education and had cared for at least one dying patient. Unlike other studies in which the FATCOD was analyzed as a total, these authors analyzed differences by questions assessing negative attitudes and questions assessing positive attitudes. For example, the question in which students agree or disagree that they would not want to care for a dying patient was a negative item. Contrarily, the item in which students agree or disagree that dying patients and their families should be in charge of decision making was a positive question. The samples differed significantly ($p=.012$) on negative items, with Iranian students having more negative attitudes. Specifically, four items had significant differences ($p<.05$), with Iranian students having more negative attitudes, including: 1) relationships with dying patients are hard to develop; 2) not wanting to care for a dying patient; 3) not comfortable talking with a patient about his/her death; and 4) conversations about death should not be conducted by a nurse. The samples did not differ significantly on positive items.

In another descriptive study, Iranmanesh and colleagues (2008) used a similar technique to compare attitudes toward care of the dying in nursing students from two states in south-east Iran, Kerman (n=60) and Bam (n=50). The FATCOD was divided into positive and negative items. Significant differences were noted on six FATCOD items. Kerman students had significantly more positive attitudes toward care of the dying

($p<.05$) and less negative attitudes ($p<.001$). Students from Kerman reported stronger opinions that palliative and end-of-life care is worthwhile ($p<.001$) and nurses help patients prepare for death ($p<.01$). Students from Bam reported stronger opinions that palliative and end-of-life care is frustrating ($p<.01$) and talking about death is uncomfortable ($p<.001$). These results indicated that the students from Kerman had more positive attitudes toward care of the dying. Furthermore, positive correlations were identified between FATCOD scores and fear of death ($p<.05$), approach acceptance ($p<.001$), and escape acceptance ($p<.001$) on the DAP-R.

In a cross-sectional descriptive study using the FATCOD, Arslan and colleagues (2014) assessed attitudes toward care of the dying in third and fourth year nursing students (n=222) from three universities in Turkey. The three schools participating in the study had recently changed the curriculum to incorporate more end-of-life care education. Regarding attitudes toward care of the dying, Arslan and colleagues found some groups of students had significantly lower anxiety in caring for dying patients than others ($p<.05$). Specifically, anxiety was lower in students reporting they had religious beliefs versus those self-identified as non-believers. Anxiety was lower in students with previous experiences caring for dying patients in their clinical courses. Additionally, students who reported a willingness to care for dying patients had less anxiety than those unwilling to care for dying patients.

One study used the FATCOD in a unique way. Strang and colleagues (2014) added open-ended questions to the FATCOD questionnaire to further explore Swedish

nursing students' (n=111) thought processes when answering each instrument item. The FATCOD was completed by students at the start of their nursing program, after their second year, and at the program's completion. Responses from the first data collection point indicated mixed results on five FATCOD items, specifically: 1) being uncomfortable talking with a dying patient about impending death; 2) students may get upset if patients give up hope; 3) it is preferable to change the subject if a patient asks if he is dying; 4) hope the patient dies when the student is not present; and 5) being uncomfortable finding a dying patient crying.

To explore the reasoning behind student response selection for these five items, an open ended question asking them to explain their reasoning was added to the instrument for the second round of data collection (Strang et al., 2014). Qualitative data analysis revealed three themes. First, students had varying death perceptions, ranging from death is natural to death is frightening. Second, students' understanding of their current situation was identified as a major theme. Students expressed feelings of being comfortable, especially students with experience caring for dying patients, and being aware of their limitations. The degree to which students identified with the patient or situation impacted their thought processes. Other students reported avoiding responsibility in caring for dying patients, preferring to have someone else answer difficult questions when asked. Finally, student expectations of their ability impacted their reasoning. Students reported needing to feel strong, be present, and have good

listening and support skills as considerations associated with answering FATCOD questions.

Some studies did not use the FATCOD to assess attitudes toward care of the dying. Researchers in these studies tended to create their own instruments to serve a specific purpose. Chow and colleagues (2014) conducted a cross-sectional cluster analysis of senior-level nursing students (n=253) from three different types of nurse training programs (baccalaureate, higher diploma, and master's degree where students enter with a baccalaureate degree in a different profession and first complete nursing training) in Hong Kong. Data about attitudes toward care of the dying was assessed with an instrument developed for the study. The authors reported that clinical experience positively influenced attitudes toward care of the dying ($p=.004$).

Two other studies used the same instruments, developed for the study, to assess attitudes toward care of the dying. Kwekkeboom and colleagues (2005) described a semester-long elective program focused on palliative and end-of-life care. Attitudes toward care of the dying and toward end-of-life care were assessed using an instrument created for the study. The authors reported that students in the intervention group (n=19) had significantly improved attitudes toward palliative and end-of-life care ($p<.01$) and toward care of the dying ($p<.05$) compared to controls (n=15). In their second study, using the same intervention in a different sample of students, Kwekkeboom and colleagues (2006) similarly found significantly decreases in concerns about caring for dying patients for students in the intervention group (n=32) from pre-test to post-test

($p<.01$) but not for controls ($n=20$). Differences between the intervention and control groups were not significant when controlling for pre-test concern scores.

Other studies used qualitative methods to assess attitudes toward care of the dying. Beck (1997) conducted a phenomenological study to determine the lived experience of caring for a dying patient for second- and third-year baccalaureate nursing students ($n=26$). Six themes were identified. First, students experienced a range of emotions when caring for dying patients, including: fear, sadness, anxiety, frustration, anger at themselves due to their inexperience and at the hospital staff for not doing more, and a need to distance themselves. Second, students began to think about the patient's life once they had begun to form a connection with the patient. Third, students learned that they needed to care for the family as well as the patient. Fourth, students felt helpless when they wanted to advocate for their patient but felt incapable of doing so in their role as a student. Fifth, the students learned that they needed to care for patients' physical, psychological, and spiritual needs when providing comfort to the dying patient. Finally, nursing students learned a lot of lessons about themselves in the process, such as the gratitude patients express when they are well cared for as they were dying.

Similarly, Cooper and Barnett (2005) conducted a qualitative descriptive study in which they analyzed first year nursing students' reflective diaries and responses from two focus groups to identify sources for anxiety in caring for dying patients. The following seven themes were identified: 1) having to cope with patient's suffering; 2) having to end a relationship with the dying patient; 3) being unsure of how to respond to the situation;

4) the type of death, with more anxiety experienced in situations of unexpected deaths; 5) cardiopulmonary resuscitation; 6) caring for the patient after death; and 7) having to develop coping mechanisms to deal with new experiences with death.

In another qualitative study, Edo-Gual, Tomás-Sábado, Bardallo-Porras, and Monforte-Royo (2014) used hermeneutics to explore nursing students' clinical experiences with death and dying. The authors interviewed nursing students (n=12) who had been exposed to care of a dying patient in their clinical courses but had not yet received formal education on palliative end-of-life care. Five major themes were identified. First, students spoke about the impact of their first experience in caring for a dying patient, including seeing a dead body for the first time. The experience of caring for a dying patient invoked a range of negative emotions, such as anger and uncertainty. Students feared becoming emotional themselves when observing families' grief following the death. Sudden death and deaths of younger individuals had more of an impact than expected deaths or those occurring in older patients.

The second major theme identified by Edo-Gual and colleagues (2014) was end-of-life care education, in which students stated needing training in how to control their emotions, how to share bad news with patients and families, about palliative sedation and euthanasia/withdrawal of care, and about postmortem care. Third, students identified the importance of providing care consistent with ethical standards, struggles with the perceived ethical dilemmas associated with palliative sedation, responding to patient and family beliefs, and the concepts of good and bad death as key ethical considerations

associated with caring for dying patients. The fourth theme related to coping, and students identified accepting death as part of life, obtaining support from staff, talking about the death, and being involved in patient care as effective strategies to cope with the emotional challenges associated with caring for dying patients. The final theme was learning, growth, and healing connections. Within this theme, students expressed that they had grown and become more aware of the importance of life by caring for dying patients. Students also grew in their professional knowledge of palliative and end-of-life care through their experiences.

Another qualitative study was conducted by Ek and colleagues (2014) to assess Swedish first-year nursing students' (n=17) attitudes toward care of the dying, especially at the actual time of death. Four themes were identified, specifically: 1) death is not as frightening as expected; 2) being physically present and giving of themselves emotionally to the dying patient; 3) feeling inadequate for caring for dying patients, especially in cases of unexpected deaths; and 4) experiencing and managing their emotional responses to the death, in both positive and negative ways. For example, positive responses to death were finding meaning in death whereas negative responses were becoming insecure when patients expressed their final wishes.

In yet another qualitative study assessing first-year nursing students, Huang and colleagues (2010) explored Taiwanese students' (n=12) first experience with death in their clinical courses. Three major themes were identified. First, students discussed providing care while patients were actively dying. Within this theme, the students shared

they had feelings of fear and dread, struggled as they watched the patient die, and, in spite of the previous responses, still felt dedicated to caring for their patient and experienced self-affirmation that they were doing their best job possible. As students encountered the actual moment of death, they reported feeling scared or trapped as well extreme sadness. They subsequently reported having an emotional breakdown when the sadness could not be suppressed. Next, students had to adjust after the patient death, by choosing to accept the death or avoid thinking about it. Students also took away positive experiences of growth, but two students reported trying to avoid processing the event.

In a different qualitative study, Woncha Loerzel and Conner (2014) taught an online death and dying elective course for nursing students and assessed fears about care of the dying by conducting a qualitative analysis of the students' final papers. Struggles with communicating with dying patients and families were the most frequently cited fear. Specifically, fears of how to start the conversation or fears of communicating incorrect information were frequently reported. Also, students reported feeling unsure of how to provide comfort to patients and families at the end of life. Furthermore, students reported fears specific to their beliefs/life. For example, a student feared caring for dying children since she had children of her own.

Parry (2011) conducted a phenomenological study assessing five nursing student's first experiences with death. One major attitudes theme was identified: emotional influence. Subthemes within emotional influence included shock/fear, speed of

patient deterioration, observed symptoms, the differences between perceptions and reality, and the need to cry.

Two studies highlighted an important consideration regarding attitudes toward care of the dying- the impact of education and experience on attitudes. Mutto and colleagues (2012) analyzed data about medical and nursing students' experiences and attitudes after caring for dying patients, their wishes about caring for dying patients in the future, and their desire for palliative and end-of-life care education. The data was aggregated from first year medical (n=100), final year medical (n=147), first year nursing (289) and final year nursing (n=194) students from seven universities in Argentina, gathered from 2005-2010. Both medical and nursing students identified that their attitudes toward care of the dying were positive, of interest, and were experienced primarily as empathy. Significant differences in nursing students from first year to final year were identified on the following statements: 1) caring for dying patients is gratifying (less agreement at post-test, p=.005); 2) I am at ease caring for dying patients (less agreement at post-test, p=.025); and 3) time spent caring for dying patients is meaningful (more agreement at post-test, p=.035) (p. 96). Two of these three changes were in the negative direction, meaning students became less comfortable agreeing with the statement as time progressed. This indicated one of two possibilities. First, experience caring for dying patients, in the absence of formal education on palliative and end-of-life care, may have had detrimental effects on students' attitudes. Second, by caring for dying

patients, students may have developed an ability to better assess their abilities with more awareness of the challenges in providing palliative end-of-life care.

Findings from an earlier study by Mutto and colleagues (2010) provide additional evidence that may help explain the findings from the article cited above. The authors collected data from first year (n=289), second year (n=55), third year (n=142), fourth year (n=14), and fifth year (n=180) nursing students from eight universities in Argentina to assess how attitudes toward care of the dying changed across the nursing curriculum. More than 70% of the students agreed with the following statements: 1) feel at ease caring for dying patients; 2) caring for dying patients is gratifying; 3) feel at ease listening to dying patients; 4) nurses should listen; 5) patients should be told the truth of their prognosis; 6) nurses should talk about death with dying patients; 7) nurses should talk about death with dying patients' families; 8) nurses should talk about last wishes with dying patients; 9) time spent preparing for death may have a positive effect on a person's life; 10) dying patients can accept death with serenity; 11) nursing education should include end-of-life care; and 12) the student is interested in providing end-of-life care.

Mutto and colleagues (2010) reported that fifth year students, compared to first year students, were significantly different regarding their wishes about palliative and end-of-life care ($p<.05$). Fifth-year students more often wished to avoid caring for patients at the end-of-life and more often expressed that caring for dying patients can be emotionally challenging for nurses. Students identified a lack of adequate education as a cause for

their death avoidant wishes. When comparing first- and final-year students, the following significant changes were noted ($p<.05$): gratification from caring for dying patients (decreased), ease in caring for dying patients (decreased), nurses should listen (increased), patients should be told the truth about prognosis (increased), and time spent preparing for death may have a positive effect on a patient's life (increased). The authors explained that their findings support that, without adequate education on palliative and end-of-life care, students tended to have negative attitudes toward care of the dying and attempted to avoid situations in which they must provide palliative and end-of-life care.

Summary of Attitudes toward Death and toward Care of the Dying

Overall, the literature revealed that two common instruments were used to assess attitudes in baccalaureate nursing students. The first instrument, the DAP-R, was used to assess attitudes toward death. The second instrument, the FATCOD, was used to assess attitudes toward care of the dying. When used together, studies found correlations and causative relationships between results of these two instruments. These instruments were used in both experimental and descriptive studies. Qualitative methods have also been frequently used to assess attitudes.

Several common results were identified in both quantitative and qualitative literature. One common finding was that students tended to experience negative emotions (e.g. anger, sadness, fear) when considering death or care of the dying, especially when they are newer students or have not had education on palliative and end-of-life care. The two studies by Mutto and colleagues (2010; 2012) provided an interesting perspective

that education about palliative and end-of-life care may adversely impact attitudes as students gain an increasing awareness of what palliative and end-of-life care actually entails. Experience may also adversely impact attitudes as students enhance their abilities to evaluate their true capabilities and competence.

Education on palliative and end-of-life care tended to decrease student fear of death and improve student attitudes toward care of the dying. This impact on attitudes has been observed in studies providing singular educational interventions and in studies in which end-of-life content, including the ELNEC Core Curriculum, was integrated throughout an entire program. However, some quasi-experimental studies did not find significant improvement in intervention groups, or found significant improvement in control groups. Therefore, the literature is inconsistent regarding the true effect of palliative and end-of-life care education on student attitudes.

Qualitative studies demonstrated that discussing palliative and end-of-life care or death will influence student attitudes. None of the qualitative studies reported a lack of attitudinal or emotional responses by students. The end of life is an emotional time for people, thus it is fitting that discussing this time period would invoke and challenge students' attitudes and emotions.

Several gaps were identified in the literature about baccalaureate student attitudes. First, as previously mentioned, results are inconsistent as to what effect education has on attitudes. Many of the studies reported significant improvement in attitudes, but a few studies did not find improvements or found the opposite effect. Second, there was a lack

of literature exploring which teaching strategies were most effective in improving student attitudes. Although many studies reported effective strategies, only Bailey and Hewison (2014) and Conner and colleagues (2014) reported an effect size for their interventions. While effect sizes can be calculated, researchers should attempt to include an effect size to allow comparison of interventions.

Furthermore, more literature is needed to explore the impact of palliative and end-of-life care education on spiritual attitudinal outcomes. One study by Smith-Stoner et al. (2011) used the Concerns About Dying scale to assess general, spiritual, and patient-specific attitudes about death. Other studies assessed characteristic information about religion, but did not necessarily explore how religious beliefs may have been impacted by palliative and end-of-life care education. Future research may want to include this aspect, especially as religion plays a key role in beliefs and values at the end of life.

This dissertation study addressed the first identified gap in the literature. Attitudes toward death and toward care of the dying were assessed across the nursing curriculum to explore changes over time with more palliative and end-of-life care education.

SUMMARY

From the literature previously reviewed, several key findings have been identified. First, the CIPP Model has been demonstrated to be an appropriate model to use to evaluate healthcare education. While there are four primary steps of the model that need to be assessed, which specific data and the mechanisms by which these data are assessed was not clearly defined, especially within palliative and end-of-life care

education literature. What was clear was that key stakeholders must be considered. The literature explored for *needs* and *problems* within the *context* evaluation provided examples of the expectations of key stakeholders (AACN, Texas BoN, ELNEC) that should be considered when evaluating a curriculum for palliative and end-of-life care content.

Furthermore, since students and faculty members are key stakeholders within nursing education, their characteristics must also be assessed as part of the *assets* of the *context* evaluation. The literature clearly identified student age, religion, previous end-of-life care education, previous experience with the death of a loved one/friend/pet, previous experience caring for a dying loved one/friend/pet, and previous experience with caring for dying patients as important characteristics of students that should be assessed within educational studies. Similarly, the literature supported assessing faculty member experience and expertise with teaching and providing palliative and end-of-life care as key faculty member characteristics.

The ELNEC Core Curriculum serves as a strong standard against which nursing schools' inclusion of palliative and end-of-life content within their curriculum could be compared. The content within the core modules (*input* evaluation) was generally accurately understood within palliative and end-of-life care education. However, literature presenting how the ELNEC Core Curriculum was integrated and taught within a specific curriculum, representing *process* evaluation, was lacking consistency and specificity. In spite of this lack of consistency, curriculum implementation must be

assessed when using the PCC Model as a theoretical framework for research. In general, palliative and end-of-life care education studies did not provide clear direction for how to assess the content and implementation of the ELNEC Core Curriculum within baccalaureate nursing education programs.

Finally, the literature reviewed demonstrates that assessment of knowledge, perceived competence, and attitudes are important when conducting an evaluation of palliative and end-of-life care education. Both qualitative and quantitative research demonstrated many deficiencies within these variables for students. Within the literature, there were reliable and valid measures that were consistently used to assess knowledge, attitudes toward death, and attitudes toward care of the dying. There was not a consistently reported reliable or valid measure for assessing perceived competence in the literature, although the PC-ELNEC has been shown to be reliable and valid in one study (Pfitzinger Lippe & Becker, 2015). Overall, the literature tended to suggest that palliative and end-of-life care education was beneficial in improving student outcomes, although some discrepancy in findings did exist.

From the review of literature, several key gaps in the literature were evident. First, the evidence indicated that students have deficits in their baseline knowledge, attitudes, and perceived competence which could be improved with education, yet some inconsistencies in the literature about this improvement existed. Furthermore, the literature was inconsistent regarding which characteristics of students and faculty

members should be assessed in palliative and end-of-life care education research. Additional research is needed to address these gaps.

Second, literature was lacking in which educational strategy effectiveness was compared to determine the optimal strategy to teach each module within the ELNEC Core Curriculum. Multiple strategies were suggested or studied, but the strategies have not been compared with each other. Future research should identify optimal strategies to maximize the impact of palliative and end-of-life care education. This is important since baccalaureate curricula have a wide variety of content areas that must be addressed to meet accreditation and practice standards; therefore, the limited time dedicated to palliative and end-of-life care must be enhanced and maximized.

Third, aside from assessing strategies, the entire baccalaureate curriculum needs to be assessed to truly explore the extent of inclusion and impact of palliative and end-of-life care content on student outcomes. Extant literature presented examples of how other topics have been assessed, such as AACN Essentials, but none provided a method for assessing a curriculum for comprehensive inclusion of the ELNEC Core Curriculum.

This dissertation study began to address the following major gaps identified in this review. Using the PCC Model, derived from the CIPP Evaluation Model, an existing baccalaureate nursing curriculum was assessed for its inclusion of palliative and end-of-life care content, specifically the ELNEC Core Curriculum content. The ELNEC Core Curriculum was deconstructed to identify its essential components. From this deconstruction, a faculty member survey was created to assess, not only the previously

identified faculty member characteristics, but also the sequencing of courses and strategies used to teach the ELNEC Core Curriculum components. Furthermore, students in the baccalaureate nursing program provided characteristic information as well as completed surveys at three time points to assess changes in knowledge of palliative and end-of-life care, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care.

Primarily, by evaluating the entire baccalaureate curriculum for the content, sequencing of content, and teaching strategies of palliative and end-of-life care education, as well as student changes in knowledge, attitudes, and perceived competence, the final gap in the literature (lack of a structured process for evaluating a curriculum) was addressed with this dissertation study.

Chapter 3: Methods

This chapter describes the study design and procedure, including sampling, recruitment strategies, procedures for protection of human subjects, data collection procedures, instrumentation, and data analysis methods.

The primary purpose of this exploratory descriptive study was to develop and test a new process of assessing palliative and end-of-life care content integration within a baccalaureate curriculum. The secondary purpose of this study was to assess changes and trends in outcomes of students participating in the program, specifically: knowledge of palliative and end-of-life care, attitudes toward death and toward care of the dying patient, and perceived competence in providing palliative and end-of-life care.

The specific aims of this study were:

Aim 1: Describe the overall implementation of palliative and end-of-life care education within an existing baccalaureate curriculum.

RQ 1.1: Where in the curriculum is palliative and end-of-life care education provided?

RQ 1.2: To what degree does the current palliative and end-of-life care curriculum content match the ELNEC Core Curriculum?

RQ 1.3: What methods are used to provide palliative and end-of-life care education?

Aim 2: Assess how students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care are

associated with content taught within each specific semester of a baccalaureate program as measured by cohort.

RQ 2.1: What are the within cohort differences of students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care across the semester?

Aim 3: Assess trends in students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care across an entire baccalaureate nursing curriculum.

RQ 3.1: What are the between cohort differences of students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care?

DESIGN

This dissertation study utilized a post-positivist philosophical approach to guide the research; therefore, the study implemented a multi-method cross-sectional design primarily to test a new process to evaluate palliative and end-of-life care content is integrated within the baccalaureate program as well as to secondarily assess changes in students' knowledge of palliative and end-of-life care, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care as a result of receiving education on this content.

STUDY PROCEDURES

Setting

The proposed study was conducted in a School of Nursing (SoN) at a large, public university in Texas. Each semester, the SoN admits approximately 60 freshman students to complete the four year baccalaureate nursing education program. In general, the first four semesters focus on university and state required core and prerequisite courses, and the final four semesters focus on nursing-specific content. Within the first four semesters, students take 3 nursing-specific courses offered by the SoN: ethics, communication, and global health. Only the nursing-specific courses were included in this dissertation study. Nursing course content was taught in traditional classrooms, laboratories, and/or in practice settings. Of note, the SoN studied has recently adopted a new curriculum in which students are enrolled in the professional nursing program upon initial admission to the university, rather than entering as pre-nursing students and later applying for the professional program. However, the students who have started in the new curriculum were within their first or second year during data collection, thus the changes to the curriculum were not captured in the collected data.

Subjects

The target sample for this dissertation study included both students and faculty members at the SoN study site. Student cohorts were analyzed as an aggregate (by cohort) to maintain a systems-level approach to measurement. For this study, five cohorts were analyzed: pre-nursing (PN), junior one (J1), junior two (J2), senior one (S1), and senior two (S2). The target sample of students consisted of approximately 60 students in

each cohort, with the exception of the pre-nursing cohort which contained approximately 120 students (approximately 360 students in total). Specific characteristics of the student study sample will be discussed at length in Chapter 4.

Within the first four semesters of the program, students had flexibility as to when the three nursing-specific courses were able to be taken, so the number of respondents varied within these courses. As will be discussed later, data collection occurred in all sections of these nursing-specific courses, but students received specific instructions to only complete the surveys once per data collection time point. Furthermore, non-nursing students were able to enroll in these courses, but specific instructions were provided so that only nursing students were asked to complete the surveys.

The final four semesters of the program were very prescriptive in the sequence in which courses were taken; therefore, each of these four cohorts had approximately 60 students each without much fluctuation in class size. These cohorts were each approached for data collection in only one lecture course for which all students within the cohort were enrolled; therefore special instructions to only complete the survey once were not necessary. These courses also had restricted enrollment for just nursing students; therefore, special instructions for non-nursing students were not required.

In addition to students, the sample included faculty members who were assigned to teach in the baccalaureate program in the fall 2015 semester. The SoN has approximately 85 faculty members who teach in baccalaureate and graduate courses. All faculty members have a minimum of a master's degree, although several also have

advanced practice licenses and/or doctorate degrees. A small subsection of baccalaureate faculty members are also doctoral students at the study site SoN (n=4). Baccalaureate faculty members teach didactic, clinical, and laboratory courses. Graduate faculty members have a minimum of a doctorate degree, and teach didactic, practicum, and, to a lesser extent, laboratory courses. Faculty members who are not doctoral students are hired as either tenure track (n=24) or clinical track (n=57). Tenure track faculty members develop their research program of work while also fulfilling their teaching and service requirements. Those in the clinical track are expected to participate in research and service goals of the SoN; however, they primarily focus on teaching. For this dissertation study, only those instructors who were assigned to teach at least one course section or course in the baccalaureate program in the fall 2015 semester were approached to participate in the study; all other faculty members were excluded.

Inclusion/Exclusion Criteria

To be considered for this study, faculty members must have been assigned to teach baccalaureate nursing courses in the fall 2015. Faculty members who taught in courses with multiple sections were all approached to participate in the study. Course instructors have flexibility with how course sections are taught; therefore, all instructors were asked to participate to capture unique differences of the various course sections.

To be considered for this study, students had to be enrolled in nursing-specific courses. Pre-nursing students enrolled in the first required nursing courses had the possibility of being approached for participation in multiple courses, but were instructed

to only complete the survey once per data collection time point. Students enrolled in the final four semesters were only approached once in a large lecture course for which all students in the cohort were enrolled and for which only one or two course sections were offered. Students were not excluded based on previous exposure to death and dying or sequencing of courses within the first four semesters. However, students were excluded from participation if they were currently repeating any of the required nursing courses throughout the program. These students likely were previously exposed to the ELNEC Core Curriculum content within the course, and these previous exposures and experiences could influence their survey responses.

Sample Size

Due to the nature of this dissertation study, the number of faculty members surveyed was limited to those teaching within the baccalaureate program. All faculty members meeting criteria were approached for study participation; thus a power analysis was not warranted for faculty members. The faculty member participant pool was 42.

Similarly, all nursing students in the baccalaureate program meeting criteria were approached for participation in the study. A power analysis was conducted using G*Power to determine the number of students needed to find significant differences ($p<.05$) across five student cohorts for three data measurement time points. The effect size ($f=0.10$) was calculated from the most conservative effect size from a previous study conducted by the researcher using the same attitude and perceived competence measures as were used in this dissertation study (Pfitzinger Lippe & Becker, 2015). In order to

obtain a power of 0.8, a student sample size of 170 was needed for this dissertation study. For this study, it was anticipated that the student participant pool would be approximately 360. Even with an attrition rate of 20%, the final student participant number could be anticipated to be 240. Therefore, the anticipated sample size for this study was adequate. Regardless of this anticipated sample size, the primary purpose of this study was to design and test a process for assessing palliative and end-of-life care content integration in a baccalaureate nursing program. The student size identified will be utilized to address the secondary purpose of evaluating changes and trends in student's outcomes.

Protection of Human Subjects

Expedited approval for this study was obtained from the University of Texas at Austin Institutional Review Board (IRB). Informed consent was sought from both student and faculty member participants individually. Participants were informed that the study was entirely voluntary and they could discontinue participation at any time. Since the researcher for this study was also a faculty member in the baccalaureate nursing program, special steps were taken to protect students for this study, including: 1) two doctoral student designees not involved with teaching the students in the study conducted the in-person data collection for students; 2) course instructors were not in the room during data collection; 3) students created unique identification codes to establish anonymity for survey responses; and 4) students were informed, in person and on the consent form, that participation would not affect their course grade, relationship with the PI or their course instructor, and no extra credit would be given for participating in the study.

Prior to the doctoral student designee's arrival at class, consent forms were sent to students by course instructors via the course management system (Canvas). Upon arrival to the class and once the instructors left the room, the designees read a script to students in which the purpose of the study and the instructions for participation were explained. Contact information for the researcher was provided in the consent form should students have questions related to the study. The researcher was also available to the designee via text messaging should any questions arise that required answering during data collection. Students were able to select between completing electronic or paper versions of the survey for in-person data collection; electronic versions only were provided when surveys were administered via the course management system. The designee collected paper surveys and delivered them to the researcher.

At the beginning of each survey, students answered questions to create a self-generated unique identification code (Damrosch, 1986). These same questions were asked at all three data collection time points to allow for responses to be linked without jeopardizing student anonymity and response confidentiality. Participants were also informed in the consent form and by the designee that data responses were confidential, would be stored securely, would only be used for research purposes, and all results would be reported in the aggregate form. Risks and benefits to their participation were discussed in the consent form.

Faculty Member Recruitment and Data Collection

All faculty members who were assigned to teach a baccalaureate nursing course in the fall 2015 semester were presented information about the study and informed consent via email during the summer 2015. These faculty members were requested, if they consented, to complete a survey in which they identified the palliative and end-of-life care content they anticipated teaching in the fall 2015 along with the associated teaching strategies they anticipated utilizing. The survey included the Faculty Member Characteristics and ELNEC Core Curriculum Assessment instruments. The survey remained open until the end of the fall 2015 semester should faculty members wish to complete the survey after the start of the semester. One additional free text response question was included within the survey to assess anticipated evaluation strategies associated with the teaching strategies (not analyzed within this dissertation study). Completion of the survey by faculty members served as consent to participate.

Over the course of two months, faculty members were sent up to a maximum of three emails: one initial email inviting them to participate in the study and two follow-up emails (between two to three weeks after the previous email was sent) reminding those who had not yet completed the survey to do so if they were willing to participate. A spreadsheet was created within which all faculty members were listed so that survey responses could be tracked. The spreadsheet was updated each time an email was sent, as well as when a faculty member completed his/her survey. Faculty members who requested via email response to the researcher to not participate were recorded on the spreadsheet and were not sent follow-up emails. One faculty member had a change of

assignment part-way through data collection, resulting in her no longer teaching in the baccalaureate nursing program. No subsequent emails were sent to this faculty member.

At the end of the data collection period, 32 of the 42 identified faculty members had completed the survey, representing a 76.2% response rate for the survey. Three of the 32 surveys (9.4%) were partially completed and the remaining surveys were fully completed. For two of these partially completed surveys, faculty members had contacted the researcher indicating they did not teach palliative or end-of-life care content in any of their courses. Through subsequent email correspondence, these individuals agreed to complete the characteristics section of the survey, hence the partially completed survey responses.

The faculty member submitting the third partially complete survey contacted the researcher expressing an inability to complete the survey in full due to survey fatigue. The faculty member indicated that for almost every response up through the midpoint of the survey, "do not teach this content" was selected. The survey was halted at this point by the faculty member due to the perception that no further survey content applied to the specific baccalaureate course being taught. Through subsequent email, the faculty member identified that the communication section of the survey would be the only survey content that applied to the course. At that point, questions from the communication section of the survey were printed and completed by the faculty member by hand. These responses were then added by the researcher into this faculty member's submission within the Qualtrics survey program.

Faculty members who did not complete the survey before the beginning of the semester were contacted in the fall semester by email or in person to see if they would be willing to participate in a follow-up interview with the researcher to verify the accuracy of ELNEC Core Curriculum information obtained from other course sections or extracted from course syllabi. Faculty members were notified on the original consent form that their syllabi would be obtained from the Assistant Dean for Administration at the School of Nursing, who receives all required syllabi submissions each semester from all faculty members, to allow for data extraction for this study. The course syllabi for all baccalaureate courses are available as open records according to university policy, therefore the content within the syllabi were not protected as proprietary information. The researcher would have completed the faculty member survey on behalf of the non-respondent faculty, using the syllabi as the data source to identify ELNEC Core Curriculum content. Of note, no syllabi actually needed to be obtained as faculty members for other course sections completed surveys for all courses.

Faculty members were consented for the interview via email or in person. At this time, should faculty members have expressed an interest in completing the survey rather than performing the interview, they were provided the consent form and the link for the survey.

Two faculty members agreed to participate in interviews. One faculty member subsequently completed the online survey prior to the interview, thus the interview was not conducted for this faculty member. The second faculty member completed the

interview by discussing overall strategies and palliative care and end-of-life content taught in her courses. In total, 34 of the 42 (81%) faculty members participated in the study. Five of the eight faculty members who did not participate were assigned to teach only clinical courses, one was assigned to teach both lecture and clinical courses, and two were assigned to teach only lecture (one pediatrics and one Spanish). However, for all courses in the curriculum, at least one course section had a faculty member complete the survey. Therefore, no syllabi needed to be analyzed for ELNEC Core Curriculum content.

Following data collection, two of the faculty members who had participated in the survey left the program for the semester, one due to illness and the other due to relocation. Responses from these individuals were kept for data collection as they reflected the planned education for the semester, just as all other faculty members' surveys reflected planned education. Furthermore, one faculty member had a change of teaching assignment after completing the survey, and contacted the researcher requesting to update responses to reflect the added course. The researcher met with this faculty member in person to update the survey response accordingly. Responses from the course for which the faculty member no longer was assigned were kept in the system as they reflected planned education for the semester. Responses for the new course were added to the faculty member's initial survey submission.

During the fall 2015 semester, the researcher observed classes, with faculty member permission, to assess ELNEC Core Curriculum content implementation. Faculty

members for courses in which a large section of ELNEC Core Curriculum content was taught were contacted to determine on which day(s) the majority of this content was covered. The researcher arranged to observe the class on that day(s) when possible. No more than three class sessions were expected to be observed per faculty member. Field notes were taken during observations for later analysis, and specifically focused on ELNEC Core Curriculum content and teaching strategies used to teach that content.

Student Recruitment

Student subjects were recruited from all sections of the three pre-nursing required courses or from one lecture course per cohort (students in the final four semesters). At the beginning of the semester, students enrolled in these courses were presented, via email through course management sites and in person, information about the study. Students enrolled in multiple courses covering ELNEC Core Curriculum content were consented once for the study and only completed one survey per data collection time point. In courses for which instructors were unable to offer class time for data collection, the students were presented information about the study in person, and then were asked to sign a form with their name and email address, indicating their interest to participate. A doctoral student designee collected this form, and then provided this to a faculty member designee (not the researcher). The faculty member designee sent out the consent form and links to the survey to these individuals via email.

In the initial student questionnaire, students were asked to identify the courses in which they were currently enrolled. They were also asked to identify which, if any, of

these courses they had previously taken. Students who indicated they were currently and previously enrolled in a course were identified as repeating the course and were excluded from data analysis.

The researcher for this study was a faculty member in the baccalaureate nursing program during the time of data collection. The faculty member designee for this study taught primarily in the graduate program at the school. The researcher used doctoral student designees, who did not teach in the baccalaureate nursing program, to explain the study to students and to administer and collect paper surveys. Prior to the beginning of data collection, each doctoral student designee met with the researcher for two separate 30-minute sessions or one hour-long session for training. During the first 30 minutes, each designee was informed about the study, had expectations reviewed, discussed time commitment, and practiced reading the script. During the second 30 minutes, each designee practiced reading the script again to verify accuracy. Specific expectations of how to collect and store the data were reviewed during this session as well.

In addition to the use of doctoral student designees, additional safe guards were established to avoid potentially coercive behavior since the researcher was a faculty member in the baccalaureate nursing program. First, students completed questions in each survey that created a unique self-generated identification code. This code was used to connect student surveys from multiple time points, but was general enough to prevent the researcher from being able to identify which student completed the survey. Second, students were notified on the consent form for the study that participation would not

affect their course grade, relationship with the researcher or their course instructor, and no extra credit would be given for participating in the study.

Only the students and the doctoral student designee remained in the room for survey completion whereas the faculty member left. Once the faculty member had left the room, the designee read a script inviting students to participate in the study, and students were directed to ask any questions they may have had. The designee was able to contact the researcher, by text messaging, to answer any questions that had not been discussed during designee training. Students were then provided paper copies of the survey if requested or were provided an email through the course Canvas site or a slip of paper (depending on course instructor preference) with the link to the Qualtrics survey. Students then were instructed to begin the survey or remain in the room until the end of class if they chose not to participate.

Original plans were to offer 30 minutes of class time for students to complete either an electronic (administered by Qualtrics) or paper version of the survey (if they did not have electronic access by phone, tablet or computer). Completion of the survey served as indication of consent. Those students not wishing to complete the survey were asked to remain until the 30 minutes were complete. Students who required additional time to complete the survey were allowed to stay beyond the 30 minutes to ensure complete and accurate data, or were able to complete the survey from home (electronic versions only). Electronic surveys remained open for five days following initiation. Once students completed the electronic survey, they needed to remain in the room until the end

of class, or, if class had concluded, would be able to leave the room. Students completing the paper survey turned in their completed survey to the doctoral student designee once it was finished and remained in the room until the end of class, or, if class had concluded, left the room. As will be discussed later, modifications to the time allowed for data collection had to be made once the semester began.

For the second and third data collection time points, the doctoral student designee read a script reminding the students about the study and the instructions for survey completion (in-person data collection). The procedure for in-class survey completion was the same as the procedure previously described. In situations in which course instructors were unable or unwilling to offer class time for the second and/or third data collection time points, emails were be sent through the course Canvas site, or via email by the faculty member designee if appropriate, with an introduction message reminding students about the survey and instructions for survey completion. Students then were provided the link to the survey, and had five days to complete the survey. A reminder email was sent via the course Canvas site 24 hours after the initial message reminding students to complete the survey.

Three time points of data collection were selected to assess for change in perceived competence in providing palliative and end-of-life care. For each data collection time point, students created their self-generated code and then completed the remaining survey questions. The self-generated code was created by answering eight questions that asked about characteristics of the student that were not subject to change

(i.e., first letter of mother's middle name or age in years as of September 1, 2015). The first survey (baseline) included questions about course enrollment, previous experiences with death and caring for dying patients, religion, previous education on palliative and end-of-life care, attitudes toward death and toward care of the dying, knowledge of palliative and end-of-life care, and perceived competence in providing palliative and end-of-life care. The second survey included questions about new experiences with death and with caring for dying patients, engagement in end-of-life simulations, and perceived competence in providing palliative and end-of-life care. The third survey included questions about new experiences with death and with caring for dying patients, engagement in end-of-life simulations, perceived competence in providing palliative and end-of-life care, attitudes toward death and toward care of the dying, and knowledge of palliative and end-of-life care.

There was no monetary compensation given to students or faculty members for participation in this study.

Student Data Collection

Faculty members teaching all sections of these courses were contacted via email with a request for class time to conduct data collection at three points during the semester. After negotiating data collection times, ten of the eleven contacted instructors agreed to provide 20 minutes of class time for data collection during the first two weeks of school. Eight faculty members were unable to commit more than 20 minutes (at least 30 minutes was originally requested), due to time needed for class-related activities. One

faculty member was not able to provide any time for data collection during class time, but did allow the study invitation to be presented during class. Students in this course were then invited to indicate interest in participating by signing their name and email on a sheet. This sheet was then managed by a faculty member designee who sent the surveys to participants at the appropriate times during the semester.

Once student data collection began, the first time point proceeded as planned with two doctoral student designees dividing the classes and conducting data collection with students for each course and section. A faculty member designee managed the sign-up sheet for the remaining course for which in-class time was not provided.

Paper surveys were available for students as needed for the first data collection time point. Of the fifty copies printed, forty were distributed, and 22 were returned. Students reported needing paper versions primarily because their computers lacked sufficient power and ample power outlets for recharging were not available in the larger classrooms in the nursing school. Completed surveys were returned to the designee at the end of the class time provided for survey completion. If students were not finished and they were unable to remain in class to complete the survey, they were given the option of completing the paper surveys and returning them to the researcher during office hours. Only one additional survey was returned following the class time provided for survey completion. Collected paper surveys were input into Qualtrics by the researcher.

Prior to the start of the semester, 5 of the 10 faculty members who had agreed to provide in-class time also agreed to provide 20 minutes for data collection at the mid-

point of the semester. For the five faculty members who did not provide in-class time, three requested the second and third time points be conducted by having the surveys sent via the course management system (Canvas) rather than providing designated class time. The final two faculty members taught ethics courses, and the middle of the semester was dedicated to education on end-of-life related ethical topics. As a result, these two faculty members requested student data from their courses be collected after all of this content had been taught (a few weeks past midterm). At that time, in-class time was planned to be provided for student data collection.

After the initial time point, most participating course faculty members indicated that it would be very difficult to provide the agreed-upon in-class time for data collection for time points 2 and 3. The option to send students the survey via the course management system (Canvas) was presented, and nine faculty members indicated this would be much easier for their course needs. One faculty member allowed for continued in-class data for this time point.

For the final time point, six faculty members had originally agreed to provide in-class time for data collection and four faculty members originally requested students be sent the survey link via the online course management system (Canvas). At the time of data collection, conversations with faculty led to all students being sent the survey via the course management system (Canvas) to reduce faculty burden; no in-class data collection was conducted.

INSTRUMENTS

Faculty Member Characteristics Information

During baseline surveys, faculty members identified the following characteristic information (Appendix H): years of teaching experience (overall and in baccalaureate programs), years of clinical practice experience, frequency of provision of palliative and end-of-life care in clinical practice, certifications, ELNEC training, and palliative and end-of-life care research focus (if applicable). These variables were discussed in Chapter 2 and were identified from researcher expertise and a review of the literature to be the most relevant for evaluation in this study. Results of this survey will be discussed in Chapter 4.

ELNEC Core Curriculum Assessment

The ELNEC Core Curriculum's eight modules were decomposed for this study by the researcher to identify the curriculum's essential elements. The decomposition model was originally developed by Borich and Jemelka (1982), and involves identifying the inputs (what the program uses), constraints (what moderates or influences the program or its outcomes), and outcomes (resulting behaviors) from the program. Furthermore, the model requires identification of first and second order outcomes. First order outcomes refer to the immediate results of completing the program that can measured directly. Second order outcomes refer to the more abstract outcomes that derive from program completion. Once the overall structure (inputs, constraints, outcomes) of the program has been identified, transactions (planned units of activity with a measureable outcome) of the program are then identified. Each transaction is broken down into component parts

until all of the elements of the program are identified. Within the decomposition model, inputs, constraints, and outcomes for each component are also identified.

For this dissertation study, the decomposition model was used by the researcher to identify all of the key components of each module within the ELNEC Core Curriculum. Appendix G provides the full decomposition of the ELNEC Core Curriculum. For all but the second ELNEC module (pain management), seven components were identified for each module. The pain module had four primary components identified, with eight sub-components identified for the fourth primary component. From this decomposition, a survey was created for faculty to complete to identify which components they anticipated teaching in their baccalaureate courses, and by what teaching strategies (Appendix I).

The ELNEC Core Curriculum Assessment faculty survey contained eight primary categories of palliative and end-of-life content information, representing the eight ELNEC Core Curriculum modules: *Introduction to Palliative Nursing Care; Pain Management in Palliative Nursing Care; Symptom Management in Palliative Nursing Care; Ethical Issues in Palliative Nursing Care; Cultural and Spiritual Considerations in End-of-Life Care; Communication; Loss Grief, and Bereavement;* and *Final Hours.* Each category had questions focused on elements of the ELNEC core curriculum identified in the ELNEC decomposition conducted by the researcher for this study. Each question offered eleven answer choices: *lecture, case study, simulation, small group discussion, essay, personal reflection/journaling, readings, film, clinical conference discussion/ debriefing, other,* and *do not teach this content.* A total of 297 content area questions

were included in the survey. For all questions, faculty members were asked to indicate which teaching strategies were planned to be used to teach the content area. Faculty members responded "Do not teach this content" if the content was not planned to be covered in their courses. Results of this survey will be discussed in Chapter 4.

One final free-text response question was incorporated in the survey in which faculty members reported what methods were planned to be used to evaluate students' learning about ELNEC Core Curriculum content. However, it was not within the scope of this dissertation study to conduct a detailed analysis of the evaluation information.

Student Characteristic Information

During enrollment, students completed a survey (Appendix F) in which they identified the following characteristics: age (interval level), semester of enrollment, courses enrolled in, course repetition (yes/no), religion (Catholic, Protestant, Jewish, Muslim, Hindu, Atheist, None, Other, Prefer not to Answer), previous end-of-life care education (previous course, content in other courses, none), previous experience with the death of a loved one/friend/pet, previous experience caring for a dying loved one/friend/pet, and previous experience with caring for dying patients. For previous experiences, students were able to provide information for up to four deaths in each category. For previous experience with the death of or caring for a loved one/friend/pet, students reported their relationship to the deceased, time since the death, and the nature of their experience with the death (observational, care provider, or other). For previous experience with caring for dying patients, students reported their role in the care

experience (nurse aide/tech, volunteer, or student nurse), their involvement (observation or active provider), and, for the first survey only, the timing of the experience (before starting the nursing program or during the nursing program).The current semester in which they were enrolled was critical information to obtain in order to assign students to their specific cohort. These variables were discussed in Chapter 2 and were identified from a review of the literature to be the most relevant for evaluation in this study.

Knowledge of Palliative and End-of-Life Care

Lange, Shea, Grossman, Wallace, and Ferrell (2009) developed the 50-item version of the ELNEC Knowledge Assessment Test (ELNEC-KAT) that was used to assess student knowledge of palliative and end-of-life care, found in Appendix J. This instrument assesses knowledge associated with all ELNEC modules. Within nursing students, the scale has good discriminant validity with item-to-total correlations ranging "from r_{pb}=0.02 to 0.60 (mean, 0.29 [SD, 0.13])" (Lange et al., p. 288) and high internal consistency, Cronbach's α=0.84.

Attitudes Toward Death and Toward Care of the Dying

General attitudes about death were assessed using the general subscale of the Concerns About Dying Scale (CAD), found in Appendix K, (Mazor, Schwartz, & Rogers, 2004). The CAD is a ten-item instrument with 5-point Likert scale questions assessing concerns about death. The instrument has three subscales: general concerns, spirituality, and patient-centered. Smith-Stoner et al. (2011) reported internal consistency: Cronbach's α= "general 0.72, spiritual 0.62, and patient 0.81" (p. 272) when used with

baccalaureate nursing students in California, Sweden, and Norway. Although the Death Anxiety Profile-Revised (DAP-R) was used more frequently in the literature, the survey was much longer than the CAD. The CAD was selected due to its length as it would hopefully help decrease student survey completion fatigue.

Attitudes toward care of the dying was assessed using the Frommelt Attitudes Toward Care of the Dying Scale (FATCOD), found in Appendix L, (Frommelt, 1991). The FATCOD is a 30-item instrument with 5-point Likert scale questions assessing anxiety toward care of the dying. Fifteen questions are positively worded and the others are negatively worded. Reverse coding is required for the negatively worded questions prior to data analysis. When used with practicing nurses, Frommelt (1991) reported *r* =.94 and .90 (two separate studies), content validity index= 1.00, and inter-rater agreement =0.98 (p. 39-40). The measure had high internal consistency for use with baccalaureate nursing students, Cronbach's α=.83 (Pfitzinger Lippe & Becker, 2015).

Perceived Competence in Providing Palliative and End-of-Life Care

Perceived competence in providing palliative and end-of-life care was measured with the Perceived Competence in Meeting ELNEC Standards (PC-ELNEC) survey (Appendix M). This instrument was adapted from the ELNEC *Peaceful Death: Recommended Competencies and Curricular Guidelines for End-of-Life Care* (Robert Wood Johnson Foundation [RWJF] & American Association of Colleges of Nursing [AACN], 1998). The instrument contains 15 items that ask respondents to rate their degree of perceived competence on a 5-point Likert scale (Strongly Disagree = 1,

Disagree = 2, Uncertain = 3, Agree = 4, Strongly Agree = 5). Item scores are summed, with the final score ranging from 15 to 75. Higher aggregate scores indicate greater perceived competency in providing care to patients at the end of life. The PC-ELNEC has strong internal consistency reliability for detecting a difference in perceived competence (r_{diff}) = .93 (pretest Cronbach's α = .94, posttest Cronbach's α = .93, and r = .04) (Pfitzinger Lippe & Becker, 2015). For undergraduate nursing students, the PC-ELNEC demonstrated high internal consistency reliability for assessing differences in perceived competence (Pfitzinger Lippe & Becker, 2015).

DATA MANAGEMENT

The methods for data management and cleaning will now be described. Data for students was entered into Microsoft Excel 2010 for data cleaning, linking, and some data analysis, and then transferred into IBM SPSS 23.0 Statistical Software for the remaining analysis. Faculty member data were uploaded into SPSS for data clearing and some analysis, and then transferred to Excel for additional analysis. An Excel data management expert was consulted for assistance with establishing faculty member and student databases as well as cleaning and linking of data.

Data from paper surveys were stored in a locked file cabinet in the researcher's office. Data from electronic surveys were downloaded and stored on an encrypted hard drive. The electronic survey data were deleted from the Qualtrics program following the completion of final data analysis. Student survey data were anonymous, and this de-identified data will be stored indefinitely. The sign-up list (name & email) for students in

course(s) for which time was not available for data collection were kept by the faculty member designee separate from all data and stored in a locked cabinet. This list was destroyed at the completion of data collection from students.

For faculty member data, initial surveys included participant contact information including name and email address. During the summer 2015, a spreadsheet containing faculty member contact information was stored on an encrypted hard drive. This spreadsheet allowed for tracking of which faculty members did or did not complete the survey. Beginning in the fall 2015 semester, this list was used to track which faculty members who had not completed the survey agreed to be contacted for an interview. This spreadsheet also recorded who had agreed to allow the researcher to conduct class observations. When survey data were analyzed, the questions regarding name and email address were removed from the survey. This left de-identified information in the surveys that will be stored indefinitely. Interviews and observation field notes were also de-identified. At the end of the 2015 winter break, the master list of the faculty member contact information, and the spreadsheet used for faculty tracking were permanently deleted from the hard drive.

Faculty Member Data Management

Faculty member surveys were collected in Qualtrics, an online survey administration system. After data collection was completed, the results were downloaded into SPSS. Lines for which no responses were recorded were deleted (n=3). Faculty member names, credentials, and email addresses were removed from the database to

allow for de-identified data analysis. Faculty member characteristic information regarding years of experience were cleaned to represent numbers only (symbols and "years" were removed). Responses with a < or + symbol were converted to just the number listed (i.e., <1 changed to 1, 40+ changed to 40). Certifications were assessed to ensure responses reported under "other" did not match possible answer choices, and responses were adjusted accordingly. When only abbreviations were provided, these were translated into full words through the use of a Google search to determine the meaning of the abbreviations. Variables were corrected to reflect the appropriate level of measurement in SPSS. Then descriptive statistics were conducted on faculty characteristic information (discussed later). The faculty member cleaned data was transferred to Excel for additional analysis, which will be described later.

Student Data Management

Student responses were cleaned and analyzed using both Microsoft Excel and SPSS. Student responses were identified across all three surveys using the unique self-generated identification codes (unique ID) provided by students at the beginning of each survey. Students answered eight individual questions at the beginning of the survey. For the ninth question, the students were asked to aggregate responses from these questions to create their unique ID.

Student responses for all three surveys were loaded into Excel. Lines of data for which no responses were recorded, indicating a student had accessed the survey via the provided link but did not attempt to answer survey questions, were deleted from each

data set (n=11 for survey one, n=12 for survey two, and n=9 for survey three). Then unique IDs were assessed to identify any replications, indicating multiple attempts by the same individual at completing the survey. Only one response was kept per unique ID. When only one of the responses was complete, the incomplete response was removed. When no responses were complete, the most complete response was kept and the other(s) removed. When both were complete, the earliest completed response was kept and the other(s) removed to represent the longest time in between data collection time points. Duplications were identified and corrected in two surveys (n=10 for survey one, n=2 for survey two).

Next, errors in the unique IDs in transposition and inconsistencies across surveys were identified and corrected. For example, in survey 1 a student may have indicated the month of birth was May and in survey 2 may have written 5. To identify these errors, coding was written by the data management expert to identify the first four characters of each code. Then item by item comparisons were made to identify and correct transposition and consistency errors.

Data was then uploaded in SPSS for additional analysis. Variables were corrected to reflect appropriate level of measurement. Before analysis, all student responses from survey one were assessed to identify students who were repeating a course. Students were identified as having repeated a course if they indicated in the characteristics questions that they were both currently enrolled and previously enrolled in the same course. These

students were eliminated from the database. All eliminated students only had responses for the first survey and did not participate in the second or third survey.

Student characteristic information results were calculated for all students who provided responses, such as age, previous experiences with death and dying, previous education on palliative and end-of-life care, and religion (described later). For data analysis of the student outcomes instruments, comparisons were made only for students for whom completed instruments were available across all indicated time points (2 for knowledge and attitudes measures and 3 for perceived competence measure).

DATA ANALYSIS

The methods for data analysis will be described next. First, faculty member data analysis will be discussed. Then, student data analysis will be discussed. The level of statistical significance set for this study was $p<.05$. Descriptive statistics including means, frequencies, and standard deviations were calculated to describe the study sample and study variables (presented in Chapter 4).

Faculty Member Data Analysis

Faculty member responses were uploaded and cleaned in Microsoft Excel as previously described. Each faculty member either entered the course ID of their assigned courses or an "x" to indicate their responses for each question. Faculty members teaching more than one course were asked to record the course ID for each response to allow for clear identification of the course within which the content is planned to be taught. Some faculty members responded with "x", even when multiple courses were taught, resulting

in an inability to identify courses in which the teaching strategy was anticipated to be utilized. In the database, these "x" responses were all converted to all course IDs for which the faculty member was assigned. For example, if a faculty member reported that she/he was assigned to teach N127P and N325P, but she/he only responded with an "x" for a given question, her/his "x" was converted to read "N127P/N325P".

In situations where faculty members had "x" responses converted, a determination needed to be made during analysis if the response reflected a lecture course, practicum course, or if the specific response needed to be removed from analysis due to an inability to determine course origin. When the converted response was reported under the *clinical conference discussion/debriefing* response option, the response was coded as a practicum course (only if the faculty member reported being assigned to teach a practicum course). When the converted response was reported for all other strategies, the response was coded as a lecture course. Responses were eliminated from analysis for responses for *other teaching strategy* as a clear determination of course origin was unable to be made.

Faculty member responses were used to answer research questions associated with Aim 1. The data analysis plan for each of these questions will now be discussed.

Aim 1: Describe the overall implementation of palliative and end-of-life care education within an existing baccalaureate curriculum.

Research Question 1.1: *Where in the curriculum is palliative and end-of-life care education provided?*

Faculty member data were used to assess where in the curriculum ELNEC Core Curriculum content was covered. The faculty member responses were aggregated to calculate how many of the questions for each ELNEC Core Curriculum primary category each faculty member reported teaching in their various courses.

Research Question 1.2: *To what degree does the current palliative and end-of-life care curriculum content match the ELNEC Core Curriculum?*

Faculty member data were assessed to determine how many questions were not reported as being addressed in any of the courses. This number was used to determine the percentage of each primary category that was not covered within the curriculum. Furthermore, the number of classes within which each module was addressed was also calculated. These additional calculations provided a more detailed analysis of the degree to which the curriculum matched the ELNEC Core Curriculum.

Research Question 1.3: *What methods are used to provide palliative and end-of-life care education?*

Frequencies of responses by faculty members for each survey question about strategies utilized to teach palliative and end-of-life content were calculated. The faculty member survey contained eight primary categories of palliative and end-of-life content information, representing the eight ELNEC Core Curriculum modules: *Introduction to Palliative Nursing Care; Pain Management in Palliative Nursing Care; Symptom*

Management in Palliative Nursing Care; Ethical Issues in Palliative Nursing Care; Cultural and Spiritual Considerations in End-of-Life Care; Communication; Loss Grief, and Bereavement; and *Final Hours.* Each category had questions focused on elements of the ELNEC Core Curriculum identified in the decomposition conducted by the researcher for this study. Each question offered eleven answer choices: *lecture, case study, simulation, small group discussion, essay, personal reflection/journaling, readings, film, clinical conference discussion/ debriefing, other,* and *do not teach this content.*

The number of responses for each strategy in each individual question was summed. In the directions for the survey, faculty members were asked to write the course ID (i.e. N325P) for each course if they were assigned to teach more than one course during the study. Some responses were completed in this manner while others were not. For the faculty members for which course distinction was not recorded in the survey, responses were recorded as one utilization of the strategy in the curriculum. For responses in which each course ID was recorded, each ID was counted as a separate utilization of the strategy in the curriculum. Once all strategy utilizations were calculated for each question, the utilizations for each of the eight primary categories were summed. Percentages were calculated to determine how much of each of the primary categories was taught using each respective teaching strategy.

Specific results from each of these analyses will be discussed later. The data analysis methods for student data will now be discussed.

Student Data Analysis

Mixed ANOVAs were planned to be used to analyze differences by cohort for the three time points for student knowledge, attitudes, and perceived competence. Statistical analyses were conducted to test for violations of assumptions, as described in Chapter 4. Student responses provided data with which to address Aim 2 and 3 of this dissertation study.

Aim 2: *Assess how students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care are associated with content taught within each specific semester of a baccalaureate program as measured by cohort.*

Question 2.1: *What are the* within cohort differences *of students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care across the semester?*

Student survey responses for all outcomes instruments at all three time points were uploaded from Qualtrics into SPSS and analyzed for assumptions first. Original plan were to use Mixed ANOVAs to address both Aims 2 and 3. To assess changes in student outcomes for Aim 2, within group differences were planned to be assessed for each cohort. However, as will be discussed in Chapter 4, issues with student response rates required modifications to the data analysis plan, resulting in dependent t-tests being calculated only for students in the S2 cohort.

Aim 3: *Assess trends in students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care across an entire baccalaureate nursing curriculum.*

Question 3.1: *What are the between group differences cohorts of students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care?*

Mixed ANOVA were planned to be used to address this aim. Specifically, to assess trends across the curriculum, post hoc analyses with Bonferroni tests were expected to be used to determine between group differences in the presence of a significant Mixed ANOVA. As will be discussed in Chapter 4, data analysis had to change following data collection to simple one-way ANOVAs due to issues with sample size.

SUMMARY

This chapter discussed the methods that were used in this study to assess palliative and end-of-life care education in a baccalaureate curriculum. All quantitative data were analyzed using SPSS statistical software and Microsoft Excel 2010. Research Aim 1 was answered using descriptive statistics to describe courses within which content was taught, to compare planned teaching with the ELNEC Core Curriculum, and to describe teaching strategy utilization. Research Aims 2 and 3 were answered using dependent t-tests and one-way ANOVAs, as opposed to planned Mixed ANOVAs, as will

be discussed later. Qualitative data obtained from faculty member and student surveys was used to inform the findings from the quantitative analyses.

Chapter 4: Results

This chapter discusses the results of this dissertation study. The sample will then be described, followed by a presentation of the descriptive statistics for all variables. Then, the results of analyses for each research question will be presented.

The study included the administration of two sets of surveys: one for faculty members developed from the decomposition of the ELNEC Core Curriculum and one for students. The faculty member survey included both the Faculty Member Characteristics and ELNEC Core Curriculum Assessment instruments. The student survey contained student characteristic questions, ELNEC Knowledge Assessment Test (KAT), Concerns About Dying (CAD), and Frommelt Attitudes Toward Care of the Dying (FATCOD), and the Perceived Competence in Meeting ELNEC Standards instruments (PC-ELNEC).

FACULTY MEMBER SAMPLE

The faculty member sample consisted of all 32 faculty members who completed the survey. This represented a 76% response rate for faculty members. Descriptive statistics for faculty members are reported in Table 1.

Overall, the faculty members in this sample had expertise in clinical practice and in education. Faculty members had a mean of 17.98 years (*SD*= 11.12, range 3-44 years) of clinical practice experience and 11.38 years (*SD*=11.2, range 1-40 years) of teaching experience. Overall, the faculty members had slightly less experience teaching in baccalaureate nursing programs with a mean 8.55 years of experience (*SD*=7.84, range 1-30 years), indicating they had other experiences in education. However, the faculty

member sample consisted of a majority of individuals who did not have specialty certifications (54.5%), despite their years of experience.

Table 1

Summary of Faculty Member Sample (n=32)

	Mean (SD)	Range
Years Practicing in Direct Patient Care	17.98 (11.12)	3-44
Years Teaching in Academic Nursing Education	11.38 (11.2)	1-40
Years Teaching in Baccalaureate Nursing Education Courses	8.55 (7.84)	1-30
	Frequency	Percentage
Specialty Certifications		
Certified Hospice and Palliative Nurse	0	
Gerontological Nursing	0	
Certified Nurse Educator	2	6
Oncology Certified Nurse	2	6
Other	11	33.3
No Certifications	18	54.5
ELNEC Train-the-Trainer	3	9.1
Research Focus related to Palliative or End-of-Life Care		
Not at All	16	48.5
Mildly	2	6.1
Moderately	2	6.1
Strongly	2	6.1
Do Not Conduct Research	11	33.3
Palliative Care Provided in Practice (Final 6 months of life)		
Weekly	5	15.2
Monthly	2	6.1
A few times per year	11	33.3
Never	15	45.5

The faculty member sample consisted of few individuals with expertise in palliative and end-of-life care. None of the faculty members reported being a Certified Hospice and Palliative Nurse or having Gerontological Nursing certification and two reported being Oncology Certified Nurses (6%), one generalist and one advanced. Only three faculty members reported having completed the ELNEC Train-the-Trainer program (9.1%). Only 12.2% of the faculty reported having research areas either moderately or

strongly related to palliative and end-of-life care. Less than a quarter of the faculty members (15.2%) also reported providing palliative or end-of-life care for patients in their final 6 months of life on a weekly basis, whereas 45.5% reported they never provide this care. Therefore, even though the sample consisted of experienced nurses and educators, there was limited experience or expertise in palliative and end-of-life care.

The faculty member sample was fairly evenly distributed among the five cohorts, with just under 25% reporting teaching multiple cohorts of students. Similarly, faculty members in the sample were fairly evenly distributed in the types of courses they were assigned to teach, with approximately one third each teaching lecture only, practicum only, or both. For the purposes of this study, a course was considered to be a clinical course if the course ID ended in "P" indicating the course was classified as a practicum. A summary of this information is provided in Table 2.

Table 2

Faculty Member Teaching Assignment

	Frequency	Percentage
Teaching Assignment		
PN	5	15.2
J1	4	12.1
J2	5	15.2
S1	7	21.2
S2	4	12.1
More than One Cohort	8	24.2
Type of Course Taught		
Lecture Only	10	30.3
Practicum Only	11	33.3
Both Lecture and Practicum	12	36.4

One faculty member reported in the comments section that she taught courses that were not listed. These courses were honors-level nursing courses that were not offered to all students and were therefore not included in the options for faculty members to select. However, her responses were included in data analysis as they reflected a portion of the curriculum that some students received.

STUDENT SAMPLE

The final sample included in this study consisted of 176 students. Although 268 students started the first survey, only 176 completed a substantial and useful portion of the instruments. For the purposes of data analysis for this study, the decision was made to include only those students for whom at least one outcome measure instrument was completed on the first survey. Details describing the response rates from each cohort are provided in Table 3.

Table 3

Student Response Rates by Cohort across Time Points

Cohort	Eligible	Time Period One	Initial Response Rate	Time Period Two	Time Period Three	Attrition Rate
PN	49	29	59.18%	6	3	90%
J1	59	49	83.05%	11	4	91.84%
J2	60	14	23.33%	4	5	64.29%
S1	64	30	46.88%	5	4	86.67%
S2	58	54	93.1%	20	16	70.37%
Total	290	176	60.69%	46	32	81.82%

In total, the student sample comprised students from all five cohorts, with J1 and S2 students having the best representation at the outset and the J2 students having the least. Between time points one and three there was an overall 82% attrition rate, with the most S2 students being retained at time point three than any other cohort.

Detailed information regarding the student sample characteristics are provided in Table 4. The student sample comprised individuals with ages that are typical for traditional baccalaureate programs. Students in pre-nursing courses were on average the youngest and students in S2 courses were the oldest, with averages progressively increasing across semesters. The ages of each cohort reflect traditional college students who enter college immediately after high school and complete their degree within four years. Of note, each cohort, except J2, contained at least one less traditional student who was of an older age, reflected by the age ranges in Table 4.

The student sample represented a mix of different religious affiliations, with Catholic being the most prevalent overall (30.5%) followed by Protestant (22%) and other (21.3%). Judaism and Muslim religious affiliations were the least frequently reported of the answer choices provided, although in free text responses students also reported Agnostic (n=1), Baptist (n=2). Buddhist (n=1), Christian (n=16), LDS/Mormon (n=1), Methodist (n=4), Nondenominational (n=5), Orthodox (n=1), and Presbyterian (n=1) religious affiliations.

Table 4

Student Sample Characteristic Information by Cohort

Characteristic	PN	J1	J2	S1	S2	Total
Age M(SD)	19.34(2)	20.57(2.4)	20.93(.7)	22.27(5.1)	22.63(2.7)	21.32(3.2)
Range	18-27	19-33	20-23	19-43	21-37	18-43
Religion						
Catholic	7 (24.1%)	13 (29.5%)	5 (35.7%)	7 (23.3%)	18 (38.3%)	50 (30.5%)
Protestant	2 (6.9%)	13 (29.5%)	3 (21.4%)	11 (36.7%)	7 (14.9%)	36 (22%)
Jewish	1 (3.4%)	1 (2.3%)	0	0	0	2 (1.2%)
Atheist	3 (10.3%)	2 (4.5%)	1 (7.1%)	2 (6.7%)	4 (8.5%)	12 (7.3%)
Muslim	1 (3.4%)	0	0	0	3 (6.4%)	4 (2.4%)
None	4 (13.8%)	5 (11.4%)	1 (7.1%)	3 (10%)	1 (2.1%)	14 (8.5%)
Other	8 (27.6%)	7 (15.9%)	3 (21.4%)	7 (23.3%)	10 (21.3%)	35 (21.3%)
No Answer	2 (6.9%)	3 (6.8%)	1 (7.1%)	0	4 (8.5%)	10 (6.1%)
Previous Palliative and End-of-Life Care Education						
Dedicated Course	0	2 (4.1%)	2 (14.3%)	2 (6.7%)	2 (3.7%)	8 (4.5%)
Integrated	12 (41.4%)	37 (75.5%)	10 (71.4%)	22 (73.3%)	48 (88.9%)	129 (73.3%)
Dedicated and Integrated	0	2 (4.1%)	1 (7.1%)	2 (6.7%)	2 (3.7%)	7 (3%)
None	17 (58.6%)	8 (16.3%)	1 (7.1%)	4 (13.3%)	2 (3.7%)	32 (18.2%)
Note: percentages calculated for responses within each column						

Students had varying prior education on palliative and end-of-life content. Overall, the majority of students (73.3%) reported having received the educational content integrated throughout their coursework to date. A few students reported completing a dedicated course on palliative and end-of-life care, but these courses were not part of the nursing curriculum and were therefore taken in other schools on campus or elsewhere. Furthermore, the highest percentage of students reporting no previous education was the pre-nursing students. This number then quickly declined for students in the J1 cohort, indicating that students receive education on this content to some extent in

pre-nursing courses (characteristic information was obtained at the start of the semester; therefore, education for current course enrollment was not captured).

Students reported varying amounts of personal experience with death across the curriculum. At all three time points, students reported information about their previous experiences with death, including death of loved ones, friends, and pets as well as deaths experienced in patient encounters. For loved ones, friends, and pets, students provided information about their relationship to the deceased, the number of years since the death (time point one only), and the nature of their experience with the death (observation or care provider) for up to four individuals per survey. For patient deaths, students reported their role (nurse aide/tech, volunteer, or student nurse), their involvement (observation or active provider), and, for the first survey, the timing of the death (before enrollment at UTSON or during enrollment at UTSON) for up to four individuals per survey.

To assess student's overall experience with death, responses for the loved ones/friends/pet category were divided into human versus pet decedents. While the loss of an animal can be very impactful in a person's life, the researcher wanted to assess students' experiences with the death of humans to provide for more control of the data. Loved ones and friend deaths were analyzed separately from patient deaths as students provided different information about each death. Descriptive statistics were calculated and are summarized in Table 5.

Table 5

Student Sample Previous Experiences with Death by Cohort

Characteristic	PN	J1	J2	S1	S2	Total
Previous Death Experiences						
Human Deaths						
Years since Death M(SD)	35	59	16	40	82	232
Pet Deaths	5.44 (4)	6 (4.62)	8.94 (5.26)	6.1 (5.15)	5.33 (4.36)	5.9 (4.63)
Years since Death M(SD)	8	14	5	9	9	45
Role	4.5 (2.88)	3.77 (3.52)	5.42 (7.56)	3.61(2.18)	3.56 (2.6)	4 (3.55)
Observation						
Provider	36 (78.3%)	67 (82.7%)	22 (81.5%)	44 (91.7%)	78 (83%)	247 (83.4%)
	10 (21.7%)	14 (17.3%)	5 (18.5%)	4 (8.3%)	16 (17%)	49 (16%)
Experience with Patient Deaths						
Number of Patient Deaths	32	69	26	32	80	239
Timing of Patient Death						
Before SoN	20 (95.2%)	38 (80.9%)	8 (36.4%)	4 (12.9%)	16 (21.9%)	86 (44.3%)
During SoN	1 (4.8%)	9 (19.1%)	14 (63.6%)	27 (87.1%)	57 (78.1%)	108 (55.7%)
Role						
Nurse Aide	5 (27.8%)	17 (27.9%)	0	18 (51.4%)	14 (19.2%)	54 (25.8%)
Volunteer	8 (44.4%)	14 (23%)	10 (45.5%)	2 (5.7%)	9 (12.3%)	43 (20.6%)
Student Nurse	5 (27.8%)	30 (49.2%)	12 (54.5%)	15 (42.9%)	50 (68.5%)	112 (53.6%)
Participation						
Observation	15 (75%)	25 (53.2%)	8 (47.1%)	5 (16.7%)	23 (35.4%)	76 (42.5%)
Provider	4 (20%)	20 (42.6%)	9 (52.9%)	25 (83.3%)	38 (58.5%)	96 (53.6%)
Both	1 (5%)	2 (4.3%)	0	0	4 (6.2%)	7 (3.9%)

Note: n= number of students
percentages calculated for responses within each column

The majority of students experienced at least one death prior to or during the semester. Overall, 144 (81.82%) students reported experiencing at least one loved one/friend death/pet death, and 103 (37.32%) students reported experiencing at least one patient death prior to or during the semester. Students experienced more human losses

than pet losses. Students experienced the loss of pets on average more recently (3-4 years) than the loss of human (5-6 years for all cohorts except J2). For approximately 80% of the deaths of loved ones/friends/pets, students experienced the death from an observational rather than an active care provider perspective. Only fourteen students (8%) reported not experiencing any deaths prior to or during the duration of the data collection period.

Unlike their experiences with the loss of loved ones/friends/pets, students engaged in more of an active provider role for patient deaths. Of note, pre-nursing students reported the least patient death experiences, the majority of which were from an observational perspective. However, students further along in the program reported more exposures to patient deaths and much more frequently engagement from a care provider perspective. Students in pre-nursing reported more exposures to patient deaths prior to nursing school and in nurse aide/volunteer roles whereas students further along in the program reported more patient death exposures in nursing student roles during nursing school. This information suggests that students gain increasing experience with patient deaths after entering the final four semesters of the program during which time they are enrolled in practicum courses.

RESULTS

The following section will discuss the results of the study as they address the overall study aims and research questions. Implications of the findings will be discussed in Chapter 5.

Aim One: Describe the overall implementation of palliative and end-of-life care education within an existing baccalaureate curriculum.

Question 1: Where in the curriculum is palliative and end-of-life care education provided?

Faculty member data were used to assess where in the curriculum ELNEC Core Curriculum content was covered. The faculty member responses were aggregated to determine how many of the questions for each ELNEC Core Curriculum primary category each faculty member reported teaching in their various courses. Classes for each student cohort were separated, and faculty member responses were calculated to determine the number of questions answered per primary ELNEC Core Curriculum category. The responses per course were calculated to determine how many items each overall course addressed. This calculation allowed for similarities and differences between course instructors teaching different sections of the same course to be identified. The results of these calculations are depicted in Tables 6-10.

There are three lecture courses in the pre-nursing semester, with 11-48% of the ELNEC Core Curriculum items covered by at least one instructor per course. All pre-nursing courses included content from at least one ELNEC Core Curriculum category. All courses included content on *Introduction to Palliative Nursing, Pain Management,* and *Communication*. The Ethics Lecture course covered the most ELNEC content overall (48.1%), which included content in all eight categories, although only one item *Symptom Management* was reported as being taught. The Ethics Lecture course addressed 100% of

the items in the *Ethical Issues* and *Cultural and Spiritual Considerations* categories, and a majority of the items in the *Introduction to Palliative Nursing* (75.9%), *Communications* (89.5%), *Loss/Grief/Bereavement* (76.2%) and *Final Hours* (67.9%) categories. Only the Ethics Lecture course addressed any of the content in the *Final Hours* category. The Global Health and Communication Lecture courses both covered a few items from multiple categories, and the Communication Lecture course had the most categories (n=4) for which no content was reported as being addressed. A summary of the pre-nursing courses is provided in Table 6.

Table 6

Pre-Nursing Course Faculty ELNEC Core Curriculum Coverage

Course	Intro Palliative Nurse (n=29)	Pain Manage. (n=92)	Symptom Manage. (n=57)	Ethical Issues (n=27)	Cultural Spirit. (n=24)	Comm. (n=19)	Loss/ Grief/ Bereav. (n=21)	Final Hours (n=28)	Total Course (n=297)
Comm. Lecture	9 (31%)	11 (12%)	0	0	0	10 (52.6%)	4 (19%)	0	34 (11.4%)
Global Health Lecture	3 (10.3%)	1 (1.1%)	6 (10.5%)	5 (18.5%)	14 (8.9%)	3 (15.8%)	0	0	32 (10.8%)
Ethics Lecture	22 (75.9%)	17 (18.5%)	1 (1.8%)	27 (100%)	24 (100%)	17 (89.5%)	16 (76.2%)	19 (67.9%)	143 (48.1%)
Notes: n=number of content areas within each category reported as being addressed per instructor percentages calculated for responses within each column									

There are seven courses in the J1 semester of the nursing program, two of which are practicum courses (including skills) and five of which are lecture courses. The practicum courses addressed 4.4-25.3% of the ELNEC Core Curriculum items, and the lecture courses addressed 1-51.9% of the items. Only the Aging Lecture course addressed at least 25% of items in all eight categories (51.9% overall). The Spanish Lecture only

addressed one category (*Communication)* and the Assessment and Skills courses each addressed two categories only (*Pain Management* and *Symptom Management)*. No course covered all of the items in any category. Overall, the *Pain Management, Symptom Management,* and *Communication* categories were addressed in the most courses, whereas the *Loss/Grief/Bereavement* and *Final Hours* categories were the least emphasized overall, with only two (Aging Lecture and Adult Health Practicum) and one class (Aging Lecture) respectively covering any of the content in these categories. The course covering the most content in any one category was the Aging Lecture for the *Ethical Issues* category (77.8%). Primarily, most courses only addressed a few items from the various categories. The information for J1 courses is summarized in Table 7.

Table 7

J1 Course Faculty ELNEC Core Curriculum Coverage

Course	Intro Palliative Nurse (n=29)	Pain Manage. (n=92)	Symptom Manage. (n=57)	Ethical Issues (n=27)	Cultural Spirit (n=24)	Comm. (n=19)	Loss/ Grief/ Bereav. (n=21)	Final Hours (n=28)	Total (n=297)
Adult Health Lecture	0	55 (59.8%)	8 (14%)	0	0	4 (21.2%)	0	0	67 (22.6%)
Adult Health Practicum	7 (24.1%)	30 (32.6%)	21 (36.8%)	4 (14.8%)	2 (8.3%)	9 (47.4%)	2 (9.5%)	0	75 (25.3%)
J1 Skills	0	9 (9.8%)	4 (7%)	0	0	0	0	0	13 (4.4%)
Assessment Lecture	0	12 (13%)	1 (1.8%)	0	0	0	0	0	13 (4.4%)
Aging Lecture	18 (62.1%)	47 (51.1%)	31 (54.4%)	21 (77.8%)	6 (25%)	12 (63.2%)	6 (28.6%)	13 (46.4%)	154 (51.9%)
Research Lecture	3 (10.3%)	8 (8.7%)	2 (3.5%)	8 (29.6%)	17 (70.8%)	1 (5.3%)	0	0	39 (13.1%)
Spanish Lecture	0	0	0	0	0	3 (15.8%)	0	0	3 (1%)
Notes: n=number of content areas within each category reported as being addressed per instructor percentages calculated for responses within each column									

There are five courses within the J2 semester, two of which are lecture and three of which are practicum courses. The lecture courses addressed 19.2-19.5% of the ELNEC Core Curriculum items, and the practicum courses addressed 0-64% of the items. The Skills course did not address any of the ELNEC categories. The Adult Health Practicum course addressed all categories (27.6-91.2%). The Mental Health courses, both lecture and practicum, covered most of the categories, but neither addressed content in the *Introduction to Palliative Nursing* category and the Practicum course also did not address *Final Hours.* In J2 courses, the most courses covered content from the *Pain* and *Symptom Management* categories, and the fewest courses addressed *Introduction to Palliative Nursing.* Details regarding J2 courses are summarized in Table 8.

Table 8

J2 Course Faculty ELNEC Core Curriculum Coverage

Course	Intro Palliative Nurse (n=29)	Pain Manage. (n=92)	Symptom Manage. (n=57)	Ethical Issues (n=27)	Cultural Spirit (n=24)	Comm. (n=19)	Loss/ Grief/ Bereav. (n=21)	Final Hours (n=28)	Total (n=297)
Adult Health Lecture	4 (13.8%)	11 (12%)	41 (71.9%)	0	0	0	0	1 (3.6%)	57 (19.2%)
Adult Health Practicum	8 (27.6%)	64 (69.6%)	52 (91.2%)	12 (44.4%)	19 (79.2%)	8 (42.1%)	8 (38.1%)	19 (67.9%)	190 (64%)
J2 Skills	0	0	0	0	0	0	0	0	0
Mental Health Lecture	0	12 (13%)	14 (24.6%)	10 (37%)	6 (25%)	3 (15.8%)	12 (57.1%)	1 (3.6%)	58 (19.5%)
Mental Health Practicum	0	22 (23.9%)	17 (29.8%)	9 (33.3%)	11 (45%)	8 (42.1%)	3 (14.3%)	0	70 (23.6%)
Notes: n=number of content areas within each category reported as being addressed per instructor percentages calculated for responses within each column									

The S1 semester is comprised of six courses, four of which are lecture courses and two of which are practicum courses. However, the Maternity and Pediatrics courses are both divided such that half of the S1 students are enrolled in Maternity courses and half are enrolled in Pediatrics courses for the first half of the semester. At the midpoint of the semester, students switch course enrollment. The Contemporary Nursing Practice and Genetics courses are taught over the full semester.

The practicum courses addressed 29.6-68.4% of the ELNE Core Curriculum items, and the lecture courses addressed 0-25.3% of the items. None of the ELNEC categories were addressed in the Genetics Lecture. The Maternity Practicum course covered a majority of the items in all categories, and addressed all items in the *Cultural and Spiritual Considerations* and *Communication* categories. The Pediatric Lecture course addressed at least one item in all categories (3.6-42.1%), and the Pediatric Practicum course addressed all categories (15.80-50%) except *Final Hours*. The *Pain Management* and *Symptom Management* categories were addressed in the most courses, and the *Introduction to Palliative Nursing* and *Final Hour* categories were addressed in the least courses. This finding is similar as was identified in the J2 semester courses. Details regarding the S1 courses are summarized in Table 9.

Table 9

S1 Course Faculty ELNEC Core Curriculum Coverage

Course	Intro Palliative Nurse (n=29)	Pain Manage. (n=92)	Symptom Manage. (n=57)	Ethical Issues (n=27)	Cultural Spirit (n=24)	Comm. (n=19)	Loss/ Grief/ Bereav. (n=21)	Final Hours (n=28)	Total (n=297)
Contemp. Pract. Lecture	0	11 (12%)	0	11 (40.7%)	0	0	15 (71.4%)	0	37 (12.5%)
Genetics Lecture	0	0	0	0	0	0	0	0	0
Maternity Lecture	0	0	3 (5.3%)	10 (37%)	4 (16.7%)	4 (21.1%)	0	5 (17.9%)	26 (8.8%)
Maternity Practicum	14 (48.3%)	62 (67.4%)	36 (63.2%)	17 (63%)	24 (100%)	19 (100%)	18 (85.7%)	13 (46.4%)	203 (68.4%)
Pediatrics Lecture	10 (34.5%)	11 (12%)	24 (42.1%)	8 (29.6%)	6 (25%)	10 (52.6%)	5 (23.8%)	1 (3.6%)	75 (25.3%)
Pediatrics Practicum	7 (24.1%)	46 (50%)	9 (15.8%)	12 (44.4%)	4 (16.7%)	5 (26.3%)	5 (23.8%)	0	88 (29.6%)
Notes: n=number of content areas within each category reported as being addressed per instructor percentages calculated for responses within each column									

There are five courses in the S2 semester, two of which are lecture and three of which are practicum courses. Four courses are conducted in the first 10 weeks of the semester. The Capstone Practicum is conducted during the last four weeks of the semester. The lecture courses addressed 0-10.4% of the ELNEC Core Curriculum items, and the practicum courses addressed 0-60.3% of the items. Neither the Public Health Lecture nor Practicum courses were reported as addressing any of the ELNEC categories. None of the courses addressed all of the categories, but the Adult Health Practicum course addressed all but *Introduction to Palliative Nursing*. Of all semesters, the S2 semester represents the least coverage overall of ELNEC content. As seen in other semesters, the *Pain Management* and *Symptom Management* categories had great

emphasis, primarily in the Adult Health Practicum (60.9% and 94.7%, respectively). The *Cultural and Spiritual Considerations* and *Final Hours* categories were addressed in the fewest courses. Details about the S2 courses are summarized in Table 10.

Table 10

S2 Course Faculty ELNEC Core Curriculum Coverage

Course	Intro Palliative Nurse (n=29)	Pain Manage. (n=92)	Symptom Manage. (n=57)	Ethical Issues (n=27)	Cultural Spirit (n=24)	Comm. (n=19)	Loss/ Grief/ Bereav. (n=21)	Final Hours (n=28)	Total (n=297)
Public Health Lecture	0	0	0	0	0	0	0	0	0
Public Health Practicum	0	0	0	0	0	0	0	0	0
Adult Health Practicum	0	56 (60.9%)	54 (94.7%)	14 (51.9%)	8 (33.3%)	14 (73.7%)	8 (38.1%)	25 (89.3%)	179 (60.3%)
Leadership Lecture	3 (10.3%)	0	0	17 (63%)	0	7 (36.8%)	4 (19%)	0	31 (10.4%)
Capstone Practicum	2 (6.9%)	13 (14.1%)	0	0	0	0	0	0	15 (5.1%)
Notes: n=number of content areas within each category reported as being addressed per instructor percentages calculated for responses within each column									

When considering all courses collectively, a few patterns appear. The *Pain Management* and *Symptom Management* categories have the greatest emphasis overall. Since these categories were emphasized in all semesters, there is likely much redundancy in content coverage across the curriculum, but this also means content is likely reinforced across the curriculum. The *Introduction to Palliative Nursing* and the *Final Hours* categories were emphasized the least. These categories, along with *Loss, Grief, and Bereavement*, most directly address end-of-life issues. Therefore, there appears to be the

greatest deficit in student education in areas relating to individuals who are entering the final months and moments of life.

In addition to overall course coverage of content, individual instructors for courses reported individualized coverage for their respective sections of each course. The instructor responses for lecture courses with multiple sections are summarized in Table 11. The instructor responses for practicum courses with multiple sections are summarized in Table 12.

There were five lecture courses taught by more than one instructor. Of these five courses, four had minimal variability (2.4-12.5%) across instructors. However, the Ethics Lecture course, which was identified as a course that addressed 48.1% of the ELNEC Core Curriculum items, had 27.6% variability across instructors (15.2-42.8%). As will be discussed in Chapter 5, this variability illustrates that some students receive more education on palliative and end-of-life care content than others, even within the same course.

Within the practicum courses, greater variability across instructors is observed (1-29.9%). The Mental Health Practicum course has the least variability (1%) between the two instructors. The J2 Adult Health Practicum (15.8%; 38.4-54.2%), Maternity Practicum (27.9%; 15.2-43.1%), and S2 Practicum (29.9%; 23.6-53.5%) have the greatest variability across instructors. In these three courses, students in different courses section receive different amounts of education on ELNEC Core Curriculum content.

Table 11

Variance in Content by Faculty in Lecture Courses

Course	Faculty Member	Intro Palliative (n=29)	Pain Manage. (n=92)	Symptom Manage. (n=57)	Ethical Issues (n=27)	Cultural Spiritual (n=24)	Comm. (n=19)	Loss/ Grief/ Bereav. (n=21)	Final Hours (n=28)	Total (n=297)	Percentage Difference (Variance)
PN Global Health	A B	0 3 (10.3%)	1 (1.1%) 1 (1.1%)	1 (1.8%) 6 (10.5%)	0 5 (18.5%)	5 (20.8%) 13 (54.2%)	1 (5.3%) 3 (15.8%)	0 0	0 0	8 (2.7%) 31 (10.4%)	7.7%
PN Ethics	A B C	8 (27.6%) 16 (55.2%) 22 (75.9%)	1 (1.1%) 4 (4.3%) 14 (15.2%)	0 0 1 (1.8%)	26 (96.3%) 27 (100%) 26 (96.3%)	4 (16.7%) 15 (62.5%) 23 (95.8%)	2 (10.5%) 17 (89.5%) 15 (78.9%)	0 9 (42.9%) 11 (52.4%)	4 (14.3%) 11 (39.3%) 15 (53.6%)	45 (15.2%) 99 (33.3%) 127 (42.8%)	27.6%
J1 Assess-ment	A B	0 0	9 (9.8%) 5 (5.4%)	0 1 (1.8%)	0 0	0 0	0 0	0 0	0 0	9 (4.4%) 6 (2%)	2.4%
S1 Contemp. Pract.	A B	0 0	0 11 (12%)	0 0	0 11 (40.7%)	0 0	0 0	0 15 (71.4%)	0 0	0 37 (12.5%)	12.5%
S1 Maternity	A B	0 0	0 0	3 (5.3%) 0	10 (37%) 0	4 (16.7%) 4 (16.7%)	4 (21.2%) 0	0 0	5 (17.9%) 0	26 (8.8%) 4 (1.3%)	7.5%

Notes: n=number of content areas within each category reported as being addressed per instructor
percentages calculated for responses within each column

Table 12

Variance in Content by Faculty in Practicum Courses

Course	Faculty Member	Intro Palliative (n=29)	Pain Manage. (n=92)	Symptom Manage. (n=57)	Ethical Issues (n=27)	Cultural Spiritual (n=24)	Comm. (n=19)	Loss/ Grief/ Bereav. (n=21)	Final Hours (n=28)	Total (n=297)	Percentage Difference (Variance)
J1 Adult Health	A	2 (6.8%)	12 (13%)	3 (5.3%)	1 (3.7%)	0	8 (42.1%)	2 (9.5%)	0	28 (9.4%)	4.6%
	B	4 (13.8%)	5 (5.4%)	0	0	0	0	0	0	9 (3%)	
	C	0	0	14 (24.6%)	3 (11.1%)	0	0	0	0	17 (5.7%)	
	D	1 (3.4%)	22 (23.9%)	8 (14%)	2 (7.4%)	2 (8.3%)	6 (31.6%)	0	0	41 (13.8%)	
J1 Skills	A	0	0	0	0	0	0	0	0	0	4.4%
	B	0	0	0	0	0	0	0	0	0	
	C	0	0	0	0	0	0	0	0	0	
	D	0	9 (9.8%)	4 (4.3%)	0	0	0	0	0	9 (4.4%)	
J2 Adult Health	A	4 (13.8%)	54 (58.7%)	21 (36.8%)	6 (22.2%)	3 (12.5%)	5 (26.3%)	2 (9.5%)	19 (67.9%)	114 (38.4%)	15.8%
	B	6 (20.7%)	60 (65.2%)	52 (91.2%)	12 (44.4%)	18 (75%)	5 (26.3%)	8 (38.1%)	0	161 (54.2%)	
J2 Mental Health	A	0	17 (18.5%)	5 (8.8%)	9 (33.3%)	6 (25%)	4 (21.1%)	0	0	41 (13.8%)	1%
	B	0	8 (8.7%)	15 (26.3%)	0	10 (41.7%)	8 (42.1%)	3 (14.3%)	0	44 (14.8)	
S1 Maternity	A	8 (27.6%)	0	25 (43.9%)	15 (55.6)	4 (16.7%)	4 (21.2%	0	0	56 (18.9%)	27.9%
	B	0	0	3 (5.3%)	10 (37%)	15 (62.5%)	12 (63.2%)	0	5 (17.9%)	45 (15.2%)	
	C	11 (37.9%)	58 (63%)	23 (40.4%)	1 (3.7%)	0	5 (26.3%)	0	12 (42.9%)	110 (37%)	
	D	5 (17.2%)	44 (47.8%)	0	9 (33.3%)	24 (100%)	19 (100%)	18 (85.7%)	9 (32.1%)	128 (43.1%)	
S1 Pediatrics	A	4 (13.8%)	32 (34.8%)	0	5 (18.5%)	0	4 (21.1%)	5 (23.8%)	0	50 (16.8%)	6.1%
	B	3 (10.3%)	36 (39.1%)	9 (15.8%)	8 (29.6%)	4 (16.7%)	8 (42.1%)	0	0	68 (22.9%)	
S2 Adult Health	A	0	29 (31.5%)	0	10 (37%)	0	10 (52.6%)	8 (38.1%)	13 (46.4%)	70 (23.6%)	29.9%
	B	0	51 (55.4%)	54 (94.7%)	7 (25.9%)	8 (33.3%)	11 (57.9%)	5 (23.8%)	23 (82.1%)	159 (53.5%)	
S2 Capstone	A	0	0	0	0	0	0	0	0	0	5.1%
	B	2 (6.8%)	13 (14.1%)	0	0	0	0	0	0	15 (5.1%)	

Notes: n=number of content areas within each category reported as being addressed per instructor
percentages calculated for responses within each column

Aim 1: Describe the overall implementation of palliative and end-of-life care education within an existing baccalaureate curriculum.

Question 2: To what degree does the current palliative and end-of-life care curriculum content match the ELNEC Core Curriculum?

As previously described, faculty member responses were analyzed to determine the percent of match between the ELNEC Core Curriculum and the baccalaureate curriculum, considering all responses and just lecture courses. When considering all responses, only fourteen questions within of all ELNEC Core Curriculum Assessment content were not reported as being taught within the curriculum in any course (4.7%). This indicated there was a 95.3% match of the baccalaureate curriculum to the ELNEC Core Curriculum indicating a very high degree of match between the two curricula. A summary of these findings are presented in Table 13.

As previously mentioned, not all content was covered uniformly across the curriculum as instructors had great variability when teaching different sections of the same course; therefore, not all students were guaranteed to have been exposed to the content prior to completing the baccalaureate program. To assess the degree of match for courses in which students are likely to have consistent education, another calculation was made using lecture courses with only one instructor or courses for which all instructors reported addressing the item. This calculation revealed a 78.45% degree match between

the program and ELNEC Core curricula. This information is represented in Table 13 as "lecture only".

Table 13

Percentage of Content Not Covered in Baccalaureate Curriculum

	Number of Questions Not Covered	**Total Questions**	**Percentage Not Covered in Curriculum**
Introduction to Palliative Nursing Care	All Responses 4 Lecture Only 9	29	13.79% 31.03%
Pain Management in Palliative Nursing Care	All Responses 8 Lecture Only 18	92	8.7% 19.57%
Symptom Management in Palliative Nursing Care	All Responses 1 Lecture Only 9	57	1.74% 15.79%
Ethical Issues in Palliative Nursing Care	All Responses 0 Lecture Only 1	27	0 3.7%
Cultural and Spiritual Considerations	All Responses 0 Lecture Only 8	24	0 33.33%
Communication	All Responses 0 Lecture Only 3	19	0 18.75%
Loss, Grief, and Bereavement	All Responses 0 Lecture Only 4	21	0 19.05%
Final Hours	All Responses 1 Lecture Only 12	28	3.57% 42.86%

When analyzing the categories individually, four categories (*Ethical Issues, Cultural and Spiritual Considerations, Communication,* and *Loss, Grief, and Bereavement)* were covered 100% in the curriculum when considering all responses. The *Introduction to Palliative Nursing Care* had the highest percentage of questions not addressed (13.79%).

When considering lecture only courses, for which more consistency is more likely to be assured, the *Ethical Issues* category had by far the highest degree of match, with only 3.7% not addressed. In contrast, the *Introduction to Palliative Nursing, Cultural and*

Spiritual Considerations, and *Final Hours* categories had the least match, with each having between 30-45% of items not taught in lecture courses. For all categories, except *Ethical Issues*, there is at least a 10% and as much as a 33% difference between all responses and lecture only responses, reflecting the variability between instructors for multiple courses.

The variability in teaching was directly observed during in-class observations by the researcher. Five lecture courses were selected to be observed as they covered a large amount of content for at least one primary category. Identified courses were: all Ethics Lecture course sections (taught by three instructors), the Aging Lecture, and the J1 Adult Health Lecture. Two Ethics Lecture instructors and the Aging Lecture instructor agreed to have in-class observations. The third Ethics Lecture instructor did not respond to several email requests for observation; thus observations were not conducted for this course. The J1 Adult Health Lecture instructor responded via email that the pain lecture was already completed, and there were no upcoming classes which seemed appropriate for observation as they did not focus heavily on ELNEC Core Curriculum content.

The Aging Lecture instructor reported that the majority of the ELNEC Core Curriculum content was planned to be taught in one class session; therefore, the instructor requested the researcher attend that session. However, the researcher was unable to attend that session due to schedule conflicts. As an alternative, the Aging Lecture instructor shared the class session presentation with the researcher, and the researcher and instructor met prior to the class session to discuss the content that would be covered during the

upcoming lecture. Based on an assessment of the presentation, students would have completed readings on the ELNEC Core Curriculum content prior to class and would receive lecture on the content in class. Four case studies were integrated within the presentation to allow for discussion and application of the content, but the instructor was unsure that time would permit for the case studies to be completed in class.

Observations were conducted in two sessions of the Ethics Lecture. Both observed sessions focused on assisted suicide and euthanasia, which allowed for better comparison of the courses. Overall, both sessions defined the different forms of euthanasia similarly. One instructor focused more on the legal aspects of assisted suicide and euthanasia, while the other focused on the implications for healthcare practice. In one course, all content for the day was covered whereas for the second course the first 1/3 of class time was used to finish content from the previous week; therefore, not all content for the day was able to be addressed in the time provided. The instructor reported that the content discussion would be finished in the next class.

Both instructors integrated discussion of real-world examples of the ethics of euthanasia and assisted suicide into their presentations, but different examples were presented in each course. In one class, students were more vocal and engaged in more discussion of the content, whereas in the other class, the instructor attempted to engage in discussion, but students were not very responsive. The instructor for this second course explained that the students had many exams that week, and over half of the class was not

present. Those students who were physically present did not appear to be mentally present or engaged in the content for this second course.

The comparison observations revealed that, overall, the content covered in different sections of the same course was similar from a broad perspective, but varied in the manner with which the teaching strategies were utilized and the content emphasized.

Aim One: Describe the overall implementation of palliative and end-of-life care education within an existing baccalaureate curriculum.

Question 3: What methods are used to provide palliative and end-of-life care education?

All teaching strategies were used to varying amounts within the curriculum to teach palliative and end-of-life care content. A summary of this data is presented in Table 14. Clinical conference discussion/debriefing was the most frequently reported strategy utilized overall (29.94%), and was utilized more frequently to teach all primary content areas except *Introduction to Palliative Nursing Care* and *Ethical Issues*. Lecture was the primary strategy utilized to teach *Introduction to Palliative Nursing Care* (19.73%) and *Ethical Issues* (22.15%). Simulation (1.5%) and film (1.5%) were utilized the least frequently overall to teach palliative and end-of-life care content. Simulation was cited as the lowest utilized strategy in four categories (*Introduction to Palliative Nursing Care, Ethical Issues, Cultural and Spiritual Care Considerations,* and *Final Hours*). Essay was the lowest utilized strategy in three categories (*Pain Management, Symptom*

Table 14

Teaching Strategy Utilization per Palliative and End-of-Life Primary Content Category in Frequency (Percentage)

	Lecture	Case Study	Sim	Small Group Discussion	Essay	Personal Reflection/ Journaling	Reading	Film	Clinical Conference Discussion/ Debriefing	Other
Introduction to Palliative Nursing Care	**58 (19.73%)**	20 (6.8%)	*1 (0.34%)*	38 (12.93%)	12 (4.08%)	36 (12.24%)	43 (14.63%)	11 (3.74%)	43 (14.63%)	32 (10.88%)
Pain Management	205 (21.44%)	27 (2.82%)	20 (2.09%)	102 (10.67%)	*2 (0.21%)*	48 (5.02%)	88 (9.21%)	4 (0.42%)	**396 (41.42%)**	64 (6.69%)
Symptom Management	96 (19.05%)	12 (2.38%)	6 (1.19%)	39 (7.74%)	*0*	24 (4.76%)	12 (2.38%)	7 (1.39%)	**215 (42.66%)**	93 (18.45%)
Ethical Issues	**132 (22.15%)**	60 (10.07%)	*2 (0.34%)*	60 (10.07%)	47 (7.89%)	36 (6.04%)	99 (16.61%)	16 (2.68%)	87 (14.6%)	57 (9.56%)
Cultural and Spiritual Considerations	58 (16.02%)	46 (12.71%)	*1 (0.28%)*	45 (12.43%)	5 (1.38%)	36 (9.94%)	41 (11.33%)	3 (0.83%)	**83 (22.93%)**	44 (12.15%)
Communication	50 (16.39%)	10 (3.28%)	11 (3.61%)	29 (9.51%)	*3 (0.98%)*	35 (11.48%)	19 (6.23%)	5 (1.64%)	**89 (29.18%)**	54 (17.7%)
Loss, Grief, and Bereavement	45 (18.6%)	8 (3.31%)	11 (4.55%)	29 (11.98%)	8 (3.31%)	37 (15.29%)	*4 (1.65%)*	5 (2.07%)	**62 (25.62%)**	33 (13.64%)
Final Hours	33 (15.14%)	16 (7.34%)	*0*	15 (6.88%)	6 (2.75%)	29 (13.3%)	17 (7.8%)	1 (0.46%)	**66 (30.28%)**	35 (16.06%)
Overall Total Across Curriculum	677 (19.47%)	199 (5.72%)	*52 (1.5%)*	357 (10.27%)	83 (2.39%)	281 (8.08%)	323 (9.29%)	*52 (1.5%)*	**1041 (29.94%)**	412 (11.85%)

Bold= highest percentage strategy utilized for the primary content area
Italics=lowest percentage strategy utilized for the primary content area
Note: percentages calculated for responses within each row

Management, and *Communication*). Reading was the lowest utilized strategy for *Loss, Grief, and Bereavement*.

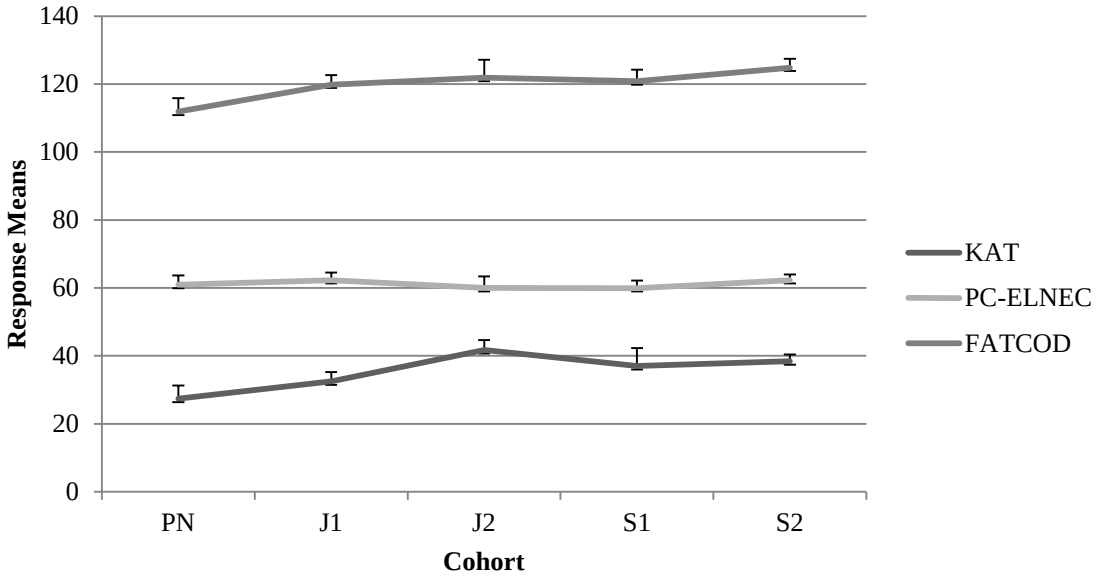
Aim 2: Assess how students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care are associated with content taught within each specific semester of a baccalaureate program as measured by cohort.

Question 1: What are the within cohort differences cohorts of students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care across the semester?

As discussed in Chapter 3, original data analysis plans involved calculating 2x5 and 3x5 mixed ANOVAs to determine between group differences and within cohort changes over time. However, due to limited response rates at time three for all measures, mixed ANOVAs were unable to be calculated. Therefore, the data analysis plan for student outcomes was modified. To assess between cohort differences, a one-way ANOVA was conducted on student results from time one. This analysis captures differences between cohorts at baseline, but does not capture differences at the end of the semester. To assess within cohort changes over time, a dependent t-test was calculated for only S2 students as there were enough students at time three to allow for this analysis; all other groups had too few students to permit such testing. The results of these analyses will be discussed later. The student's means at the first time point for each cohort on all

measures are presented in Figure 2. Descriptive statistics for each measure at all times points by cohort is provided in Table 15.

Figure 2.
Student Outcome Measures for Time Point One by Cohort



As demonstrated in Figure 2, student's attitudes toward care of the dying slightly increased across cohorts. Student perceived competence remained roughly the same across the cohorts, with a slight decrease noted for J2 and S1 cohorts. Finally, students' knowledge increased through J2 but then decreased again, with S2 students having lower knowledge than J2 students.

Table 15

Descriptive Statistics of Student Outcome Measures by Cohort at All Time Points

	All	**PN**	**J1**	**J2**	**S1**	**S2**
KAT Time 1 Mean (SD)	n=131 35.11 (8.91)	n=20 27.4 (8.31)	n=36 32.47 (8.31)	n=7 41.71 (3.2)	n=15 37 (9.66)	n=53 38.4 7.41
KAT Time 3 Mean (SD)	n=21 42 (3.35)	n=3 37 (5)	n=1 43	n=3 42.67 (2.08)	n=3 44 (1.73)	n=11 42.55 (2.58)
FATCOD Time 1 Mean (SD)	n=176 120.4 (10.5)	n=29 111.9 (10.41)	n=49 119.86 (9.84)	n=14 121.86 (9.11)	n=30 120.83 (9.23)	n=54 124.85 (9.56)
FATCOD Time 3 Mean (SD)	n=32 122.94 (7.17)	n=3 118 (5.29)	n=4 121.5 (8.85)	n=5 118.8 (5.72)	n=4 122.5 (4.8)	n=16 125.63 (7.39)
CAD Time 1 Mean (SD)	n=176 35.57 (5.01)	n=29 36.1 (4.72)	n=49 35.51 (4.57)	n=14 38.36 (5.29)	n=30 35.3 (5.09)	n=54 34.78 (5.32)
CAD Time 3 Mean (SD)	n=32 35.28 (4.83)	n=3 32 (7)	n=4 36.75 (6.6)	n=5 37.4 (4.62)	n=4 35 (5.16)	n=16 34.94 (4.19)
PC-ELNEC Time 1 Mean (SD)	n=176 61.48 (6.74)	n=29 60.93 (7.22)	n=49 62.29 (7.72)	n=14 60 (5.88)	n=30 59.93 (5.99)	n=54 62.3 (6.1)
PC-ELNEC Time 2 Mean (SD)	n=46 60.93 (8.14)	n=6 64.83 (8.23)	n=11 60 (10.88)	n=4 56.25 (3.86)	n=5 61.2 (10.09)	n=20 61.15 (6.56)
PC-ELNEC Time 3 Mean (SD)	n=30 61.2 (7)	n=3 64.67 (9.07)	n=3 57.33 (5.69)	n=5 58.4 (7.44)	n=4 53 (3.16)	n=15 64.4 (5.34)

Instrument Internal Consistency Reliability

Internal consistency reliability was assessed for all four instruments at the first point by calculating the Cronbach's alpha in SPSS. The Cronbach's Alphas based on standardized items are reported.

The KAT, FATCOD, and PC-ELNEC instruments all had good internal consistency reliability (α=.88, =.85, and =.91, respectively). The CAD instrument had a poor internal consistency reliability (α=.59). Due the instrument's poor reliability, the students' results for the CAD instrument were not further analyzed and will not be discussed.

Checking for Violations of Statistical Assumptions

Statistical tests for the student outcome data were dependent t-tests and one-way ANOVAs. Assumptions of dependent t-tests assessed were: normality of the sampling distribution, interval level measures, and responses obtained from the paired/dependent groups (Fields, 2009). Given the data obtained, the assumptions of paired groups and interval level data were met. For the dependent t-test, normality of the difference scores needs to be assessed, rather than assessing normality of the raw scores (Fields, 2009). To assess normality, the Kolmogorov-Smirnov (K-S) test for normal distribution was tested for difference scores between the first and final time points for all instruments. None of the K-S test results were significant: KAT (p=.2), PC-ELNEC (p=.2), FATCOD (p=.12). Since all assumptions of the dependent t-test were met, the parametric test was able to be calculated.

Assumptions of one-way ANOVAs were assessed, including: homogeneity of variance, normality, and independent samples. The Levene's test of equality of error variances were non-significant for all instruments except the PC-ELNEC scores from the first time point (p=.01). According to Field (2009), the ANOVA test is robust to

violations of homogeneity of variance when sample sizes are equal. The sample sizes for each cohort vary by test; therefore results must be interpreted cautiously. For significant results, post-hoc analyses were planned to be conducted using the Games-Howell test for equal variance not assumed to address this violation of assumption.

The Kolmogorov-Smirnov (K-S) test for normal distribution was tested for all instruments at each time point. The KAT at times one and three, and the PC-ELNEC at time one, all had significant K-S test ($p<.05$), indicating that the distribution of these results was significantly different from the normal distribution. The other results of the K-S test were non-significant. According to Field (2009), the ANOVA tests are robust to violations of normality.

One caution with the use of the ANOVA is that the samples are not truly independent as they are obtained from students enrolled in course sections together and in the same program. According to Field (2009), violations of the assumption of independence result in an increased risk of a type one error; therefore, the results of the ANOVA must be interpreted cautiously. The results of these analyses will be discussed later.

As previously discussed, original data analysis plans called for the within groups differences of 2x5 and 3x5 mixed ANOVAs to address this research question. However, due to low response rates at the final time point, the data analysis plan was modified such that dependent t-tests for S2 students only was conducted as this cohort had enough students to permit such statistical analysis. This statistic results in the second time point

for the PC-ELNEC being eliminated from analysis. However, this results in an increased sample size for analysis, since only ten S2 students completed all three surveys, whereas fourteen students completed the first and third only.

Results of the dependent t-tests revealed no statistically significant differences from time point one to three on all measures. For the KAT, there was not a significant difference between time one (M=43.27, SD=4.76) and time three (M=42.55, SD=2.58); t(10)=.547, p=.6, Cohen's d=0.18. For the PC-ELNEC, there was not a significant difference between time one (M=62.6, SD=5.74) and time three (M=64.4, SD=5.34); t(14)=-1.525, p=.15, Cohen's d=-0.4. For the FATCOD, there was not a significant difference between time one (M=124.31, SD=7.76) and time three (M=125.63, SD=7.39); t(15)=-.857, p=.41, Cohen's d=-0.21.

The outcomes reveal small effect sizes for all instruments and no significant differences. However, these results likely reflect issues with small sample sizes as opposed to the true results of the impact of education. Given the largest effect size for the PC-ELNEC, future analysis of changes over time regarding perceived competence in larger sample sizes is warranted. The implications of these results will be discussed further in Chapter 5.

Per the operational definition of *knowledge of palliative and end-of-life care*, provided in Chapter 1, students demonstrate adequate knowledge if they obtain 40 or more correct responses on the KAT at time point three. Of the complete responses on this instrument at time one (n=131), 50 students obtained 40 or more correct answers

(38.17%). Furthermore, the overall mean score on the KAT at time point one was 35.11 (SD=8.91). Lower percentages of pre-nursing (n=1/20; 5%) and J1 student (n=7/36; 19.44%) obtained 40 or more correct answers, whereas higher percentages of students further along in the program, such as S1 (n=8/15; 53.33%) and S2 (n=28/53; 52.83%) students, obtained 40 or more correct answers. The pre-nursing student who scored greater than 40 may have possibly been a student in the RN to BSN program, who although instructed in the directions not to participate, may have completed the survey. However, the mean scores for each cohort did not reflect the same pattern. While knowledge did improve from pre-nursing (M=27.4, SD=8.31) to S2 (M=38.4, SD=7.41), the S1 cohort (M=37, SD=9.66) had a lower mean but a higher percentage of students obtaining 40 of more correct answers. The highest percentage of students obtaining 40 or more correct responses was the J2 cohort (n=6/7; 85.1%), but this cohort had the smallest sample size of all cohorts.

The highest score of any pre-nursing student was 42, whereas one S1 and eight S2 students obtained scores between 47 and 49. These students in particular had the highest scores overall, indicating the most knowledge of palliative and end-of-life care at time point one.

Aim 3: Assess trends in students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care across an entire baccalaureate nursing curriculum.

Question 1: What are the between group differences of students' knowledge, attitudes toward death and toward care of the dying, and perceived competence in providing palliative and end-of-life care?

The original plan to address Aim 3 was to use the between group differences of the 2x5 and 3x5 mixed ANOVAs to determine differences between each cohort at baseline and at the end of the curriculum. However, due to the small sample sizes of students completing both surveys, the decision was made to instead look for differences between cohorts only at baseline using a one-way ANOVA. Although this analysis method did not allow for differences between cohorts to be assessed at the end of the semester, this did allow for larger sample sizes to be analyzed, resulting in greater statistical power. Given that three outcome variables were assessed, a Bonferroni adjustment was made, resulting in significance for each outcome set at the $p<.02$ level. Descriptive statistics for each instrument are provided in Table 16.

Table 16

Student Means and Standard Deviations Across the Semester by Cohort

	KAT	**PC-ELNEC**	**FATCOD**
PN Mean Beginning (±*SD*)	(n=20) 27.4 (8.31)	(n=29) 60.93 (7.216)	(n=29) 111.9 (10.41)
J1 Mean Beginning (±*SD*)	(n=36) 32.47 (8.31)	(n=49) 62.29 (7.71)	(n=49) 119.86 (9.84)
J2 Mean Beginning (±*SD*)	(n=7) 41.71 (3.2)	(n=14) 60 (5.88)	(n=14) 121.86 (9.11)
S1 Mean Beginning (±*SD*)	(n=15) 37 (9.66)	(n=30) 59.93 (5.99)	(n=30) 120.83 (9.23)
S2 Mean Beginning (±*SD*)	(n=53) 35.11 (8.91)	(n=54) 62.3 (6.1)	(n=54) 124.85 (9.56)

Results of the one-way ANOVAs are presented in Table 17. Analysis revealed significant cohort differences for the FATCOD $F(4, 171)=8.55$, $p<.02$, partial eta squared .17. Post hoc analysis using the Games Howell test revealed the significant cohort differences ($p<.05$) were all between pre-nursing and all four other cohorts. Pre-nursing students had a much smaller mean at baseline than all other groups, indicating that pre-nursing students had more negative attitudes than students who had progressed further in the nursing program.

Table 17

Between Group Differences for Student Responses

	df	*F*	η^2	*P*
KAT*cohort	4	9.393*	.23	.00
PC-ELNEC*cohort	4	.984	.02	.42
FATCOD*cohort	4	8.553*	.17	.00
Note * significant $p<.02$				

Significant cohort effects were also found for the KAT, $F(4,126)=9.393$, $p<.02$, partial eta squared=.23. Post hoc analysis revealed significant differences between the following cohorts at $p<.05$: pre-nursing and J2, pre-nursing and S2, J1 and J2, and J1 and S2. Both pre-nursing and J1 had the lowest baseline means, respectively, indicating they had the least knowledge of palliative and end-of-life care information compared to students who had progressed further in the nursing program. No significant cohort effects were identified for the PC-ELNEC using a one-way ANOVA, $F(4,171)=.984$, $p>.02$, partial eta squared=.02.

SUMMARY

This chapter presented the results of the study as they answered the research aims and questions. Results of all administered surveys were then presented and summarized. Overall, the majority of the items within each primary content area of the ELNEC Core Curriculum, identified and assessed in the faculty member survey, appeared to be addressed in the curriculum. There was great variability noted for practicum courses in which multiple instructors taught different sections, whereas there was more consistency in the lecture courses, with the exception of the Ethics Lecture course. In-class observations further supported that that variability in teaching strategy utilization within difference course sessions did occur; however, overall content taught within the courses tended to be similar.

The student survey results did not reveal significant changes in outcomes over the course of the semester for S2 students. These results more likely represented an issue

with low power and limited sample size as opposed to a true reflection of student changes over time. There were significant between cohort differences at baseline for *knowledge* and *attitudes*, with students earlier in the curriculum having less knowledge and higher anxiety that students further along in the program.

The results of this study shed important light on key considerations for future utilization of this method of data collection and curriculum assessment, which will be discussed at length in the next chapter. In addition, the next chapter will summarize this dissertation, including a discussion of strengths, limitations, future education, research, and policy implications and conclusions.

Chapter 5: Summary, Discussion, Limitations, Implications, Future Research and Conclusions

This chapter includes a summary of this study and a discussion of the findings. It includes comparisons of study findings with current research, strengths and limitations of the study, and future implications with regards to nursing practice, education, policy, and research.

SUMMARY OF THE STUDY

The primary purpose of this exploratory descriptive study was to develop and test a new process of assessing palliative and end-of-life care content integration within a baccalaureate curriculum. The secondary purpose of this study was to assess changes and trends in outcomes of students participating in the program, specifically: knowledge of palliative and end-of-life care, attitudes toward death and toward care of the dying patient, and perceived competence in providing palliative and end-of-life care.

The study used the Palliative Care Curriculum Evaluation Model, adapted from Stufflebeam's (2003) Context, Input, Process, and Product (CIPP) Evaluation Model, as the conceptual framework. The study had an exploratory descriptive design. The methods used to obtain data and describe the sample were successful in achieving the aims and research questions of this dissertation study. Data were collected from faculty members over two months in the summer and from the students over the course of the fall 2015 semester. Thirty three faculty members participated in the survey and one faculty member participated in a face-to-face interview. The final sample of students included in the study was 176. For students, the decrease in student survey completion from the

beginning of the semester to the end of the semester reflected an 82% attrition rate. Implications of this high attrition will be discussed later.

The instruments used in this dissertation study for faculty members included: a) Faculty Member Characteristics survey and b) End of Life Nursing Education Consortium (ELNEC) Core Curriculum Assessment survey. The instruments used in this dissertation study for students included: a) student characteristics survey; b) ELNEC Knowledge Assessment Test (KAT); c) Concerns About Dying (CAD); d) Frommelt Attitudes Toward Care of the Dying (FATCOD); and e) Perceived Competence in Meeting ELNEC Standards (PC-ELNEC).

The inclusion criterion for faculty members was that they must have been assigned to teach at least one baccalaureate nursing course at The University of Texas at Austin School of Nursing during the fall 2015 semester. The inclusion criterion for students was that they must have been enrolled in required nursing courses during the fall 2015 semester. Students were only excluded if they reported they were repeating a required nursing course in the fall 2015 semester.

Characteristic information for faculty members and students were calculated using descriptive statistics. Descriptive statistics were also used to summarize the strategies used to teach ELNEC Core Curriculum content, the courses within which ELNEC Core Curriculum content was taught, and to determine the degree of match between the ELNEC Core Curriculum and the baccalaureate curriculum. Due to small sample sizes, mixed ANOVAs were not able to be performed as planned to evaluate

student outcomes. Instead, dependent t-tests were performed to examine change over time for S2 student outcomes from the beginning to end of the semester. One-way ANOVAs were performed to examine between cohort differences on all students at the beginning of the semester.

Descriptive analysis showed that the faculty members had an average of 17.98 years of nursing practice experience (SD=11.12), 11.17 years of academic teaching experience (SD=11.35), and 8.55 years of baccalaureate teaching experience (SD=7.84). The majority of faculty members held no certifications (54.5%), did not conduct research related to palliative or end-of-life care (48.5%) or did not conduct research at all (33.3%), and never provided palliative care in practice (45.5%). The faculty member sample consisted of relatively the same number of faculty members representing each cohort (PN n=5, J1 n=4, J2 n=5, S2 n=4). However, there was a slightly higher representation in the faculty member sample of individuals teaching in the S1 cohort (n=7). The faculty members were also equally representative of those teaching in lecture only (30.3%), practicum only (33.3%), and both lecture and practicum courses (36.4%).

Descriptive analysis showed that the student sample comprised individuals with an average age of 21.3 years (SD=3.2). All student cohorts were relatively equally represented at the beginning of the semester (PN=16.48% J1=27.84%, S1=17.50%, S2=30.68%), with the exception of the J2 cohort which only comprised 7.95% of the total sample. The majority of students reported receiving palliative and end-of-life care education as integration throughout their nursing courses (73.3%). Overall, all cohorts of

students had an average of at least one exposure to death prior to the beginning of the semester. Student experiences of patient deaths shifted from more observations and prior to nursing school for pre-nursing students to mostly active care provider and during nursing school for S2 students.

The CAD was excluded from analysis due to poor internal consistency reliability. For the remaining outcome measures, student results were analyzed in two ways: 1) scores for S2 students whose responses were able to be linked from survey one to survey three were analyzed for within group differences over time; and 2) scores for all students from just the first survey were analyzed to assess baseline differences between cohorts. The average scores for students at time point one was 35.11 (SD=8.91, n=131) for the KAT, 61.5 (SD=6.74, n=176) for the PC-ELNEC, and 120.4 (SD=10.5, n=176) for the FATCOD.

Three dependent t-tests were conducted to examine within group changes across the semester for the S2 cohort. None of the outcomes revealed statistically significant changes over the course of the semester for S2 students. However, effect size analysis with Cohen's d statistics revealed that the PC-ELNEC had a near-moderate effect size. Further analysis with larger samples sizes for all outcome measures is needed. Possible explanations for these results will be discussed later.

One-way ANOVAs were computed to assess differences between cohorts on all measures at the beginning of the semester. Due to small sample sizes at the final time point and the likelihood of a Type 1 error, the 2 x 5 mixed ANOVA results were unable

to be conducted; hence the need to assess baseline differences between cohorts only. Significant cohort differences were observed for the KAT, $F(4,126)=9.393$, $p<.02$, partial eta squared=.23, and FATCOD, $F(4, 171)=8.553$, $p<.02$, partial eta squared .17 (note Bonferroni adjustments made for significance value). Post hoc analysis using the Games Howell test revealed the significant cohort differences ($p<.05$) on the FATCOD were between pre-nursing and all four other cohorts. Pre-nursing students had significantly more negative attitudes toward care of the dying at baseline compared to all other cohorts. Post hoc analysis on the KAT revealed significant differences between the following cohorts at $p<.05$: PN and J2, PN and S2, J1 and J2, and J1 and S2. Pre-nursing and J1 students had the lower mean scores, indicating these cohorts had significantly less knowledge of palliative and end-of-life care at baseline compared to J2 and S2 students. No significant differences were observed for the PC-ELNEC, $F(4,171)=.984$, $p>.02$, partial eta squared=.02.

DISCUSSION OF THE OVERALL METHOD

This dissertation study was primarily performed to design and test a new process for assessing palliative and end-of-life care education within a baccalaureate curriculum. This study was the first of its kind to use the PCC Evaluation Model to evaluate palliative and end-of-life content integration, based on the ELNEC Core Curriculum, within a baccalaureate curriculum. This section will discuss key findings and considerations regarding the utilization of the methods from this study. Strengths, weaknesses, and modifications for the new evaluation process will be discussed.

First, the methods used for collecting faculty member survey data were effective overall. When ELNEC Core Curriculum Assessment surveys were completed, a comprehensive analysis of a faculty member's planned integration of palliative and end-of-life content within his/her course was able to be completed.

In spite of the success of the ELNEC Core Curriculum Assessment in obtaining the necessary data, some changes are recommended for the future. First, faculty members need a more detailed explanation of what is going to be assessed in the survey. The introduction to the survey informed faculty members that they were going to be asked to report the palliative and end-of-life content they planned to teach in their assigned courses. Two faculty members responded indicating that they did not teach this content in any of their assigned courses. However, faculty members teaching other sections of the same course reported teaching at least some of the content. Also, faculty members who had completed the survey commented to the researcher in passing that they did not realize everything that went into palliative and end-of-life care, particularly that pain and symptom management was included as a key component.

These findings suggests one of two possibilities: 1) faculty members did not understand all aspects of palliative and end-of-life care that were going to be assessed, or 2) faculty members had great differences regarding the content covered in their course sections. It is the opinion of the researcher that the former was more likely the case, especially given that field notes revealed overall similarities across two sections of the Ethics Lecture course with differences primarily in teaching strategy utilization.

Furthermore, different sections of a course share the same learning objectives; therefore, major content areas should be fairly similar across sections. Therefore, it is more likely that faculty members needed a more detailed explanation of all components of palliative and end-of-life care that were going to be assessed. One possible solution in the future would be to provide the names of the eight ELNEC Core Curriculum modules to provide a more detailed introduction to the content within the survey. The category would provide a brief introduction to the content within the survey without burdening faculty with a lengthy explanation.

Next, the faculty member survey was administered prior to the beginning of the fall 2015 semester. This posed a few problems with data collection and analysis. First, the timing allowed for identification of courses for which in-person observations should be conducted; however, the timing only allowed for an assessment of planned content integration for the fall 2015 semester. This meant that actual content integration and education was not able to be assessed. Second, prior to the beginning of the fall 2015 semester, a few faculty members had changes in their teaching assignments, which required extra steps to be taken to obtain data to capture these changes. Third, as planning for courses proceeded, a faculty member may have changed his/her plans, which could either increase or decrease the palliative and end-of-life care content integration that took place in the semester.

As a result, two alternative solutions are proposed. Further research is needed to determine which solution is superior. First, faculty member surveys could be

administered after the completion of the semester. This timing would allow for actual content integration, as opposed to planned integration, to be assessed. Furthermore, one faculty member reported teaching every item within the survey because he/she would be willing to cover any of the content should the situation present itself during the clinical day. Having faculty members complete the survey after the completion of the semester would avoid inclusion of these hypothetical responses, and would solely reflect the education that was provided to students. However, timing survey administration for the end of the semester would prevent identification of courses and specific dates for observation. Furthermore, there is a possible issue about inaccurate recall or memory regarding the content that was actually taught within the course.

The second option is for the survey to be administered both before the beginning and after the completion of the semester. Faculty members could report planned content integration prior to the start of the semester, and then report the actual content integration after the start of the semester. This sequencing allows for a determination of which courses to observe as well as could shed light on how teaching plans changed over the course of a semester. The downside to this method would be that faculty members may not be willing to complete the lengthy survey twice. Careful consideration as to how to obtain data at the second time point is required.

Another suggested change for the ELNEC Core Curriculum Assessment survey is a modification of teaching strategy choices. Many of the faculty members in the survey reported teaching both clinical practicum and skills courses (also considered a practicum

course for this curriculum). These faculty members frequently selected *clinical conference discussion/debriefing* as the teaching strategy utilized in their courses. Many of these individuals did not distinguish within which course, the practicum or skills, the content was taught. Inclusion of a skills course option, such as *hands-on practice in lab*, would provide more detail to distinguish practicum versus skills courses when faculty members do not make the distinction for themselves.

Also, the *other* category should be changed such that faculty members free text the strategies utilized. One of the Ethics Lecture course faculty members reminded students in the observed class section about an upcoming debate. This teaching strategy was not listed as an option; therefore, this instructor would have had to select *other* to capture the content taught by this teaching strategy. Asking faculty members to write the teaching strategy would provide more detail and richness to the teaching strategies being assessed in the study.

Furthermore, the option for faculty members to write "x" for their courses should be eliminated from the survey instructions. Instead, the faculty members should be asked to write the course identifier for all responses. Twenty of the faculty members required at least one "x" response to be recoded. This resulted in the researcher having to determine the most likely course in which the content was taught, or the response had to be eliminated from analysis of teaching strategy utilization. By having faculty members only respond with course names, the ambiguity associated with an "x" response would be eliminated.

Finally, the ELNEC Core Curriculum Assessment responses need to be changed from a forced response to an optional response. Three faculty members commented, either in the comments section of the survey or via email with the researcher, that the survey was very long and that the forced response made the task even more time-consuming and frustrating. They said they would have preferred to only have to write their response when appropriate as opposed to selecting the *do not teach* response option frequently. The original intention of the forced response selection was to ensure accurate and complete data and to prevent faculty members from overlooking content areas. However, due to the reported burden of the forced response, and optional response would be preferable for faculty members completing the survey.

Faculty members may also need to be approached in person to participate in the study, especially those who did not respond to any email requests to participate. Faculty members may not have realized the significance of the email they received, and, as a result, did not participate in the study. A request to participate in person would allow for the purpose of the study to be explained, questions to be answered, and hopefully the faculty members would then participate in the study.

The above suggested revisions are not intended to indicate that the ELNEC Core Curriculum Assessment was not successful in achieving its objective of obtaining data to describe palliative and end-of-life content integration within the curriculum. On the contrary, the instrument was very effective in obtaining detailed information regarding the teaching strategies utilized in the curriculum as well as the sequencing of the content

within the curriculum. The proposed recommended changes are presented as refinements to the survey and the process of administration. However, any changes to the survey should be tested for effectiveness while maintaining integrity to the purpose of using the survey for describing palliative and end-of-life care education in a curriculum.

Another primary success of the method of this study was the use of the student unique ID code, which allowed for linking of student responses across time points. Use of the ID code allowed for students to maintain anonymity in responding to the surveys. Furthermore, the ID code allowed the researcher, who was a faculty member, to include her students within the study sample without the risk of identification of which students did or did not participate in the study. The ID code was easy for students to generate at the beginning of each time point. Also, none of the students completing the first survey had the same ID code. This supports that the ID code provides for linking of students across time points with a minimal likelihood of identical codes being obtained from multiple students.

The use of the ID code requires a few considerations for future studies. First, a data management expert was needed to help with linking the ID codes across surveys. For this study, each survey was input separately into Qualtrics; therefore, the responses of all students from each survey were downloaded into separate databases. The data management expert was critical in writing code to effectively and efficiently identify matching student ID codes across surveys to allow for aggregating the results for all three surveys. For this study, the data management expert was an expert in the use of Microsoft

Excel; therefore, that program was used for linking of data. Other programs may be able to identify matching ID codes and link data across the surveys, but a data management expert for the program would be needed to make that determination. The linking of ID codes across surveys would be difficult for data management system novices as special coding is required.

Aside from the need for a data management expert to assist with linking ID codes across surveys, the use of the ID code was straightforward, easy to use, and effective in maintaining student anonymity while allowing responses to be matched over time.

Several key considerations were identified for conducting surveys of students in the future to assess palliative and end-of-life care education outcomes. First, only two times points were necessary for assessing changes in student outcomes over time for the PC-ELNEC. The initial intention of the second time point was to capture changes in perceived competence associated with completing an end-of-life simulation for S2 students and capturing the transition of S1 students from maternity to pediatrics courses or vice-versa. There were not clear teaching experiences planned for the semester for other cohorts which would be expected to clearly influence student perceived competence in providing palliative and end-of-life care. The middle time point was potentially useful for this specific curriculum, but would not be expected to have the same utility in other programs that did not have a similar situation. Furthermore, the addition of the middle time point also potentially increased student survey fatigue, resulting in the very low final response rate. Future utilizations of this process for assessing palliative and end-of-life

care education should only include administering student surveys at the beginning and end of the semester (two time points).

Another consideration for administering student surveys in the future is that students need to be provided adequate in-class time to complete the surveys or need ample incentives to complete the surveys outside of class time. Several events transpired during the process of data collection to support this recommendation. First, there was a very large attrition rate for student responses (82%) over the course of the semester. In-class time of upwards of 20 minutes was provided for the first survey, and no in-class time was provided for any students at the final time point. Given that just under half of the surveys at the first time point were complete, the argument could be made that providing adequate time, at least 30 but preferably 45 minutes, would have allowed for more completed surveys to be obtained. Providing more in-class time would not necessarily change a students' decision to participate in the study, but would allow students who were willing to participate to provide complete responses. Some students completed the first survey after class once a reminder e-mail was distributed by the course instructor, but not all students did so.

Furthermore, there were three-fourths less completed surveys at the third time point compared to the first time point. No in-class time was provided for completion of these surveys. Modifications in timing of survey administration were made such that the survey was administered two weeks prior to the end of the semester, in the hopes of avoiding conflicts with multiple examinations and project deadlines. However, the lack

of in-class time to complete the surveys was likely a large contributor to the decline in student participation. As a result of the decreased participation, analysis of student survey outcomes lacked adequate power, modifications to the data analysis plan had to be made, and results had to be interpreted cautiously. By providing adequate in-class time for both time points, student response rates will hopefully be improved in future implementations of the methods used in this study.

However, given the current status of nursing education, in which a lot of content needs to be covered in a short period of time, faculty members may be unable to provide in-class time for data collection. In situations in which the provision of class time is unrealistic, adequate incentives for student participation are required, such as bonus point, gift cards, or exception from an assignment. Researchers would still need to negotiate with educators should class-related incentives be provided (a less expensive alternative), but would prevent the need for additional financial resources with which to provide incentives.

As previously discussed, the CAD lacked adequate internal consistency reliability, and the results of this instrument were not assessed. Pfitzinger Lippe and Becker (2015) similarly found the CAD to lack adequate internal consistency reliability in assessing changes in student attitudes associated with a simulation intervention. Given these findings, the CAD does not appear to be an appropriate instrument for assessing changes in student attitudes associated with educational interventions. Smith-Stoner, Hall-Lord, Hedelin, and Petzäll (2011) reported that the CAD was reliable for describing

student attitudes, especially when comparing students in different countries. The CAD appears to be better suited for describing student attitudes toward death, rather than assessing changes over time. As a result, the CAD should be excluded from future implementations of the methods of this study.

An alternate instrument to the CAD for assessing student attitudes toward death is the Death Anxiety Profile- Revised (DAP-R) created by Wong, Reker, and Gesser (1994). Dobbins (2011) reported the DAP-R was successful in identifying changes in student attitudes toward death over time. The DAP-R is 32 questions long and the CAD is 10 questions long. As a result, the integration of the DAP-R into student outcomes should be carefully considered as it will substantially increase an already lengthy survey. After completing the first survey, one student informed the researcher she felt like she had "just taken the NCLEX….that survey was brutal." This student felt the survey packet was already very long, and the substitution of the DAP-R for the CAD would result in the survey being 22 questions longer.

Issues of additional survey fatigue for students should be carefully weighed against the benefits of obtaining data about student attitudes toward death. This researcher argues that of all student outcomes assessed, attitudes toward death was the least likely to be influenced be palliative and end-of-life care education. Furthermore, attitudes toward care of the dying are of greater importance in nursing education as this has a greater impact on student and patient outcomes. Therefore, exclusion of any

instrument to assess attitudes toward death may be appropriate for future studies assessing palliative and end-of-life care education.

Faculty members providing class time for student surveys need ample instruction that all students, non-nursing and nursing, will need to remain in the room for the data collection period. Faculty members were informed before the data collection time that all students needed to remain in the room. On the day of data collection, faculty members were very supportive in encouraging students to participate in the study. However, some faculty members then dismissed all non-nursing students since they did not meet eligibility criteria. As a result, a few nursing students informed the designees that they felt like they were being punished for being nursing majors because they had to stay, even if they did not want to participate in the study. Faculty members need clearer instructions regarding the course of events and expectations for data collection time in class to avoid these issues in the future.

Students may benefit from the inclusion of an open-ended question at the completion of the survey that allows for reflection on the experience of completing the survey. After completing the first survey, one student informed the researcher that she was unlikely to complete the survey again because it was very stressful. In particular, this student reported feeling distress in answering the questions about her own death, referring to the CAD. The student said, “I don’t mind thinking about other people dying, but I really don’t like thinking about my own death. I mean, I know I am going to die someday, but I don’t like to think about it.” Inclusion of a reflection question at the end

of the survey would allow students to debrief from the experience of completing the survey. The reflection question should be included even if the CAD were removed from the overall survey.

One final key consideration for administration of the student survey is having paper surveys available at all in-class time points. The Qualtrics survey was developed to allow for completion on electronic devices, including laptops, phones, and tablets. Even so, at the first time point, some students elected to complete paper surveys due to limited battery life on their electronic devices. Paper surveys allowed these students the ability to participate in the survey should they wish to do so.

The student surveys themselves were effective in obtaining the necessary data about student characteristics and outcomes. However, a major limitation of this study is the issue with faculty member and student survey completion. Not all faculty members completed the survey or interview when requested. Furthermore, there was a high attrition rate for student survey completion.

One possible solution for resolving issues with survey completion is having increased administrative support for the study. Incorporating the survey within the curriculum as a required program evaluation component, verses an extracurricular research project, would increase the importance of completing the survey. Faculty members need encouragement from administration to complete their survey in order to obtain a complete dataset. This study was approved by the IRB, and administrative approval to conduct the survey was obtained, but additional support to endorse the study

or encourage faculty member engagement was not obtained. Encouragement from administration or incorporating the survey within the purview of a program evaluation might result in more faculty members completing the survey in full.

Administrative support would also be helpful in ensuring adequate in-class time or incentives were available for student survey completion. All faculty members were willing to provide at least access to the students in their courses, meaning all students had the option of completing the surveys. However, due to competing demands for class time, faculty members could not commit to providing more than 20 minutes for students to be introduced to the study, have questions answered, and complete their survey. This was not enough time, resulting in many incomplete surveys. Administrative support for allowing time in-class to conduct the study or the provision of incentives might encourage faculty members to promote student survey participation.

Faculty members participating in this study did not have any incentives for either completing the survey or for providing time for student surveys. Incentives may be helpful in promoting participation. An ideal incentive would come in the form of credit for promotion, such as service to the school. Similarly incentives for students, such as extra credit or gift cards, might also encourage students to participate in the survey, regardless of how much class time was provided. Students in this study completed the survey out of kindness to the researcher, and few students completed the final survey. It is possible that the students who completed the final survey either had an interest in

palliative and end-of-life care or in assisting with research. Incentives would encourage more students, regardless of their interests, to complete all surveys.

A strength of the process developed for this study was the flexibility with which student data could be collected. When originally scheduling the second time point, two of the three faculty members teaching the Ethics Lecture indicated that the requested dates took place in the middle of education on palliative and end-of-life related ethical issues. These faculty members requested the date for the second time point be pushed back until after all the content was taught. The flexibility of the timing for data collection allowed for student changes after receiving this information to be captured, rather than obtaining data that only captured a portion of this content. However, due to the low response rate on the second and third surveys for all cohorts of students, the actual changes associated with learning this content in the Ethics Lecture was unable to be calculated.

The flexibility of student time points also allows modifications to be made so that the surveys are not administered during exam- or project-intensive weeks. The original plan for the third time point was to collect data during the final week of class. However, after the second time point, the researcher realized that response rates were poorer when students had a large amount of school assignments for the week as opposed to weeks with fewer due dates. As a result, the third time point was moved forward a few weeks to encourage student participation when they had fewer demands on their time.

Another strength of the method for data collection was the use of doctoral student designees to help with data collection. The use of multiple designees guaranteed that data

could be collected from all selected courses. With only one designee, schedule conflicts would have prevented all students from being accessed. However, with two designees, all classes were able to be accessed for data collection. Furthermore, the use of designees allowed for students to maintain anonymity from the researcher. The use of doctoral student designees also likely reduced the perception of pressure to participate in the study. Since the designees were students and not faculty members, baccalaureate students may not have viewed them as having as much power to influence their grades; therefore, there was less risk of feeling coerced to participate.

Overall, the method of data collection for this study was successful in achieving its aims and generating data to answer the research questions. Future utilizations of this dissertation study's new evaluation process will require slight modification and refinements; however, the methods were effective in obtaining the necessary data to describe palliative and end-of-life care education in a baccalaureate curriculum.

DISCUSSION

The PCC Evaluation Model was used as the conceptual framework for this study. Next, the components of the PCC Evaluation Model will be discussed as they were addressed within this dissertation study.

Discussion of PCC Evaluation Model Results

Context

The context of this study, based on the PCC Evaluation Model, was comprised of two components: 1) needs and problems, and 2) assets. Each component will be discussed individually.

Needs and Problems

The identified needs and problems for this study were: 1) AACN *Essentials of Baccalaureate Education for Professional Nursing Practice* (AACN Essentials); 2) Texas BoN *Differentiated Essential Competencies for Graduates of Texas Nursing Programs* (DECs); and 3) ELNEC competencies and objectives.

Results of the study support that the AACN Essential and the three DECs were addressed within the baccalaureate curriculum, even though both the AACN Essential and DECs lacked specific detail as to how the objectives were to be met. The AACN Essential appeared to be adequately addressed because there was a 95.3% match between the ELNEC Core Curriculum and the baccalaureate curriculum studied when all faculty member survey responses were analyzed. These results support that palliative care and end-of-life outcomes are addressed within the curriculum, although with some variability within courses with multiple section. Aspects of the three DECs can be addressed by items within the PC-ELNEC. Students at the end of the baccalaureate program reported high perceived competence in meeting each of the PC-ELNEC items, supporting that the DECs objectives were addressed within the curriculum.

Assessment of the ELNEC competencies and objectives was also conducted in this dissertation study. The ELNEC competencies were assessed using the PC-ELNEC. Students at the end of the baccalaureate program reported higher perceived competence in meeting all PC-ELNEC items than students in earlier semesters, (although the results were not statistically significant); therefore results suggest that the ELNEC competencies may have been adequately addressed in the curriculum.

However, it was unclear as to whether or not the ELNEC objectives were clearly well addressed in the curriculum. As discussed in chapter 4, the majority of the content for all of the modules appeared to have been addressed within the curriculum, and for four modules (*Ethical Issues, Cultural and Spiritual Considerations, Communication, and Loss/Grief/Bereavement*) appeared to have been covered completely. This did not necessarily mean that the objectives for all modules were met equally across the curriculum given that the content was provided with great variability in courses with multiple sections taught by multiple instructors. When considering only lecture courses, all categories except *Ethical Issues,* had a majority of the content addressed, but not more than 85% (the *Ethical Issues* category had 96.3% of the content covered in lecture courses). Therefore, there was not enough degree of match between the ELNEC Core Curriculum decomposition and the baccalaureate curriculum to confidently support that the ELNEC module objectives were all adequately addressed within the curriculum. Further detailed analysis would need to be conducted, comparing each individual question within the module to the module objectives in order to determine whether or not

the objectives were met within the baccalaureate curriculum (such analysis was outside of the scope of this study).

In Chapter 2, literature pertaining to each of these needs and problems was discussed. The identified literature did not provide any information as to how these needs and problems were addressed through research. The majority of the studies presented information about the needs and problems, but did not test their integration within nursing education. For accreditation purposes, schools must provide documentation and evidence to support that all objectives and standards are met. Therefore, information about the integration of these needs and problems exists, but is not readily accessible in evidence-based data articles for public review and analysis. Due to the lack of available research, comparisons of outcomes of this study to the literature were unable to be made. This dissertation study was the first of its kind to provide data regarding how these needs and problems were addressed as they pertain to palliative and end-of-life care education.

Assets

The assets from the CIPP Evaluation Model for this study were faculty member and student characteristics.

Faculty Member Characteristics

Overall faculty member characteristics demonstrated that students in the baccalaureate program were taught by individuals who are experienced with nursing practice and education, but are relatively inexperienced and lacking sufficient expertise in

palliative or end-of-life content. Specifically, faculty members lacked ELNEC training. Therefore, even though content was reported as being taught in the curriculum, one must be cautious in presuming that the content was being taught in a manner that was truly consistent with the ELNEC Core Curriculum.

As discussed in Chapter 2, limited evidence exists regarding faculty member characteristics. Therefore, these findings provide an initial assessment and representation of palliative or end-of-life expertise of faculty members. The results of this study were not intended to be used to identify associations or causal links between faculty member characteristics and palliative and end-of-life care education, but were rather used to describe the characteristics of faculty members teaching in the program being evaluated.

Student Characteristics

Descriptive analysis showed that the student sample comprised individuals with an average age of 21.32 years (SD=3.2), with a range of 18-43 years. In the literature discussed in Chapter 2, student age was assessed in nineteen studies. Most studies reported student mean ages ranging in the 20s, with a range encompassing older individuals. For example, Barrere and colleagues (2008) reported that 41% of their sample was 23-27 years and 32% was 28-35 years. One student in their sample was 46-55 years, which is similar to the one student outlier in this dissertation study sample (43 years). Brajtman and colleagues (2007) reported that 47% of their sample was 18-22 years old and 41% was 23-27 years old. They similarly had one student older than 46 years old. Fluharty and colleagues (2012) reported a mean age of 27.3 years for their

sample, with a range of 19 to 67 years. Kwekkeboom, Vahl, and Eland (2005) reported their sample had a mean age of 21.53 (SD=1.35) for their intervention group and 23.93 (SD=6.77) for their control group. Wallace and colleagues (2009) reported their sample of sophomore students had a mean age of 20.77 years (SD=5.39), with a range of 19 to 45 years, and the senior students had a mean age of 22.24 years (SD=0.49), with a range of 21-23 years. Conner, Woncha Loerzel, and Uddin (2014) had an older sample than this dissertation, with 37% of their control group and 34% of their intervention group being 18-27 years, 37% and 38% being 28-35, respectively, and 26% and 28% being 36 years or older, respectively. In comparison to other studies, the student sample in this dissertation study was similar to other samples reported; therefore the results of the studies can be compared.

The majority of students in this dissertation study reported receiving education on palliative and end-of-life care content integrated throughout their nursing courses (73.3%), and 18.2% reported having never received any palliative and end-of-life care education prior to the beginning of the semester. The findings of this dissertation study are similar to other studies in the report of student education as content integration in the curriculum but differ in student reports of no previous education. Conner, Woncha Loerzel, and Uddin (2014) reported that 77% of the control group and 62% of the intervention group had prior education integrated into courses, while smaller percentages had completed entire courses dedicated to the topic (17% and 10%, respectively) or had never received education (6% and 28%, respectively). Barrere and colleagues (2008)

similarly reported that 41% of their sample had received education in other courses, 35% had no previous education, and 24% had a previous course dedicated to the topic. Kwekkeboom, Vahl, and Eland (2005) did not distinguish the type of education, but reported that students in the intervention group had a mean of 2.47 (SD=1.35) hours of prior education and students in the control group had 2.80 (SD=2.08) hours. One study's findings are very different from those of this dissertation study. Wallace and colleagues (2009) reported that only 3.8% of the sophomores and 4.9% of the seniors had previous education on palliative and end-of-life care. The findings from this dissertation reflect the literature in that the majority of students obtain their education on palliative and end-of-life content as integration throughout the curriculum, but differ in that few students in the program reported no education whereas other studies reported slightly higher percentages of students with no prior education.

Overall, 92% of students in this study had at least one exposure to death. Students also primarily experienced patient deaths in observational role prior to nursing school, but had increasing experience in care provider role for dying patients as they progressed through the program. This reflects a sample of students who have less experience with caring for dying patients early on, but gain experience as they progress through school. However, the sample overall has some sort of exposure to the loss of a loved one, friend or pet; therefore, they have some experiences with being exposed to death.

Barrere and colleagues (2008) reported that 41% of their sample had experience with caring for dying individuals prior to their educational intervention and 59% had

experiences after their educational intervention. Brajtman and colleagues (2007) reported the following percentages of experience in caring for dying individuals by year in the program: year 1 (26%), years 2 (36%), year 3 (62%), and year 4 (91%). Chow and colleagues (2014) reported that 44.4% of cluster 1, 63.5% of cluster 2, and 62% of cluster 3 had previously experienced the death of a loved one. Chow and colleagues also reported that 49.1% of cluster 1 had observed end-of-life care 1-2 times and 57.4% had never participated in end-of-life care; 40.5% of cluster 2 had observed end-of-life care 1-2 times and 55.4% had participated in end-of-life care 1-2 times. Conner, Loerzel, and Uddin (2014) reported that 74% of the control and 83% of the intervention group had previous experience caring for someone who was dying and 38% of the control and 69% of the intervention groups had experienced a loss within the past year. Kwekkeboom, Vahl, and Eland (2005) reported that 89% of the intervention and 93% of the control group had previously experienced the death of a loved one or friend and 89% of the intervention and 80% of the control group had cared for dying patients. The findings of this dissertation study differ from the literature in that many students in the dissertation had previous experience with death, whereas other studies, except the study by Kwekkeboom and colleagues, had roughly half of the student populations with prior death experience.

Most students in the dissertation study reported being Catholic (n=50) or Protestant (n=36), with a variety of other religious preferences reported. These results are very reflective of the geographic region in which the study took place. Nineteen students

reported not have any religious preference. Chow and colleagues (2014) reported that 25-35% of their sample had a religious preference, which was much lower than what was reported in this dissertation study. Conner, Loerzel, and Uddin (2014) had results that more closely represented the findings of this dissertation study in that 78% of the control and 82% of the intervention groups reported having religious preferences. Wallace and colleague (2009) similarly reported that 82.7% of their sample was Catholic. Overall, the results of this dissertation study are similar to many other studies, but do differ from those reported by Chow and colleagues.

The purpose of obtaining student characteristics in this dissertation study was to describe the sample and to provide another means of assessing student experiences with death. The student characteristics are not intended to be used to find associations or causal links with outcomes. However, in future studies, these associations may be able to be determined given the data provided, as long as there are enough student responses to have adequate power to conduct such analysis.

Input

The inputs of the PCC Evaluation Model addressed in this study were measured through the ELNEC Core Curriculum decomposition and the results of the subsequently developed faculty member survey.

The Aging, Mental Health, and Ethics Lecture and J1 Adult Health, Maternity and Pediatrics Practicum courses were primary sources of content for almost all ELNEC Core Curriculum categories. *Pain Management* and *Symptom Management* content was taught

in the most courses. *Communication* and *Ethical Issues* content was also taught in many courses/course sections. *Introduction to Palliative Nursing* and *Final Hours* content was taught in the fewest courses. The J2 skills, Genetics Lecture, and both the Public Health Lecture and Practicum courses were not reported as incorporating any of the palliative and end-of-life care content.

Further analysis of courses by instructor revealed that in practicum courses, specifically J2 Adult Health, Maternity, and S2 Adult Health, there was 15.8-29.9% variability in ELNEC Core Curriculum content coverage. Of the lecture courses, only the Ethics course had marked variability between instructors (27.6%). All other courses taught by multiple instructors had less than 10% variability. Given this variability across courses, it is possible for one student to be enrolled in sections throughout the curriculum that heavily emphasize palliative and end-of-life care content while another student is enrolled in sections with far less emphasis on the content. These students would very likely have different knowledge, attitudes toward death and toward care of the dying, and perceived competence at the completion of the program due to the variability in exposure to the content. This variability across instructors may provide one possible explanation for the range in student scores across cohorts, particularly on the knowledge measure.

The variability in practicum courses might partially be explained by factors outside the control of the faculty member. For example, variables such as patient census of the unit, type of unit, length of the practicum course, time of year, and partially chance will all influence how much or little exposure to patients requiring palliative and end-of-

life care students receive. Therefore, one might argue that the variability cannot be completely controlled within practicum courses.

However, as previously discussed, the *clinical conference discussion/debriefing* teaching strategy was the most frequently cited for all ELNEC Core Curriculum categories except *Introduction to Palliative Nursing* and *Ethical Issue*s. This suggests that instructors teaching practicum courses plan to use their time to cover this content with their students prior to the beginning of the semester; therefore, careful planning and coordination by all course faculty has the possibility of reducing, although not completely eliminating, the variability across course sections.

Another possible alternative to decreasing the variability within practicum courses is to utilize additional teaching strategies to address palliative and end-of-life care content that is either currently missing from the curriculum or is highly variable in its coverage within courses. Specifically, the use of simulations within practicum courses might help to reduce the variability. A recent national, longitudinal, randomized-control trial by Hayden and colleagues (2014) reported that simulation was found to produce similar student learning and performance outcomes when substituted for 50% of clinical time. Therefore, appropriately developed end-of-life simulations could be utilized within practicum courses as a possible solution to reduce faculty member variability in teaching palliative and end-of-life care content.

Another possible solution for decreasing faculty member variability when teaching palliative and end-of-life care content is to implement additional course

monitoring and process improvement evaluations to identify the sources of variability. With increased identification of the variability, faculty members can work with administrators or supervisors to determine appropriate courses of action to ensure greater consistency between course sections. The same processes could similarly be used to increase consistency within lecture courses taught by multiple faculty members.

There was a 95.3% match between the ELNEC Core Curriculum and the baccalaureate curriculum assessed when all faculty member responses were considered and a 78.45% match when just lecture courses were considered. There was the greatest match for *Ethical Issues* and the least match for *Final Hours*. The curriculum appears to be strong in its coverage of the *Ethical Issues* category, given the high degree of match in all responses and lecture only responses. However, the greatest weaknesses are noted for the *Introduction to Palliative Nursing, Cultural and Spiritual Considerations,* and *Final Hours* categories. When all responses are considered, only the *Introduction to Palliative Nursing* has greater than 10% of content not covered. However, when lecture only responses are considered, these three categories have more than 30% of items not covered. These categories represent the greatest gaps in student palliative and end-of-life care education within the curriculum.

Clinical conference discussion/debriefing was the most frequently reported strategy utilized overall (29.94%), and was utilized more frequently to teach all primary content areas except *Introduction to Palliative Nursing Care* and *Ethical Issues* (lecture was the primary strategy utilized to teach these two categories). Overall, simulation and

film were utilized the least frequently across the entire curriculum to teach palliative and end-of-life care content (1.5% each). Faculty members teaching practicum courses in particular may want to consider increasing the use of simulation to help reduce some of the variability across instructors since simulation can provide real-world-type practice experiences within a controlled environment.

The literature identified in Chapter 2 relating to the ELNEC Core Curriculum described the content in each module. No literature was identified that addressed the findings reported as input, therefore no comparisons to the literature are able to be discussed.

Process

The process evaluation for this study was assessed by observation of, and recording of field notes for, various class sessions in which ELNEC Core Curriculum content was taught. Overall observations of two Ethics Lecture courses revealed that, overall, the content covered in different sections of the same course was similar from a broad perspective, but varied in the manner with which the teaching strategies were utilized within the courses.

Literature discussed in Chapter 2 related to *process* evaluations focused on target participants, timing, and teaching strategies. The identified literature for target participants focused on the use of the ELNEC Core Curriculum to training educators to teach nursing students or, in some studies, for use by clinical agencies. None of the identified literature addressed direct utilization of the ELNEC Core Curriculum with

nursing students, but rather reported educators should teach the curriculum after completing the Train-the-Trainer program. In this dissertation study, planned utilization of the ELNEC Core Curriculum was assessed.

The literature for timing was very sparse, with only two articles identified. Malloy and colleagues (2011) and Barrere and colleagues (2008) explained that ELNEC Core Curriculum content needs to be integrated across a curriculum in an appropriate sequence, with introductory content taught first followed by a progression through the other modules' content. In this dissertation study, the *Introduction to Palliative Nursing Care* content was primarily taught in introductory courses, and S2 courses were not cited as primary sources for this content, although it was cited as a secondary practicum source for a few content areas. However, for all other primary categories, the content was taught in courses across the curriculum. This meant that the content was integrated throughout the curriculum. The findings of this dissertation are similar from the two articles identified, in that the content was integrated throughout the curriculum and introductory content was taught early on. However, evidence supporting the proper timing of the modules and content, as well as the appropriate courses within which the content should be taught, is lacking from the literature. This dissertation study did not provide evidence to address this gap; therefore, further research is needed.

The literature for teaching strategies discussed in Chapter 2 focused primarily on aspects of the cognitive domain (didactic strategies, case studies, writing assignments, comparing and contrasting clinical experience to best practice) and affective domain

(personal assessment of cultural and spiritual values, experiential exercise, small group discussions, film, and reflection) of learning. A few teaching strategies focused in the psychomotor domain were suggested, including listening exercises, role-playing, and skills performance. In contrast, this dissertation study found that for six of the eight primary categories, *clinical conference discussion/debriefing* was the most frequently cited teaching strategy. Although one could argue that this specific teaching strategy addresses all three domains of learning, the strategy typically is utilized based on real-world experiences that need to be discussed and explored. Clinical conference discussion/debriefing was not cited in the literature as a recommended strategy to teach this content. For the *Introduction to Palliative Nursing* and *Ethical Issues* content areas, *lecture* was the most commonly cited teaching strategy. These findings more closely resemble the literature. Therefore, the findings of this dissertation study differ from the extant literature for most modules. Future research needs to explore if *clinical conference discussion/debriefing* is an appropriate and effective teaching strategy for this content.

Product

This dissertation study assessed student outcomes as the *Product* evaluation, with *knowledge of palliative and end-of-life care (knowledge), perceived competence in providing palliative and end-of-life care (perceived competence)*, *attitudes toward death,* and *attitudes toward care of the dying* being assessed across the fall 2015 semester.

In this dissertation study, *knowledge* was assessed using the ELNEC Knowledge Assessment Test (KAT). These was a significant between group different ($p<.02$) for

cohorts across semesters, with students earlier in the program having less knowledge than students further along in the program. These findings were similar to those reported in the literature. Al Qadire (2014) and Wallace and colleagues (2009) reported statistically significant improvements in knowledge for students as they progressed through their academic programs. Arber (2001), Bratjman and colleagues (2007), and Kwekkeboom, Vahl, and Eland (2005) reported statistically significant improvements in knowledge for individuals in intervention groups as compared to students in control groups whenever teaching strategies were utilized to teach various aspects of palliative and end-of-life care. These findings from literature all support the findings of this dissertation study which indicate that education improves knowledge of palliative and end-of-life care, especially as students progress through their academic programs.

Perceived competence was measured in this dissertation study using the Perceived Competence for Meeting ELNEC Standards (PC-ELNEC) instrument. Although the results of this dissertation study did not find significant improvement, a near-moderate effect was observed in S2 students, supporting that the improvement in scores observed is still worth considering. These findings reflect the literature, which overall demonstrates that education and the ability to provide palliative and end-of-life care in practicum courses improves perceived competence. Chow and colleagues (2014), found that only clinical experience was significant for influencing perceived competence. Efstathiou and Walker (2103) and Weissman (2011) reported significant improvement in perceived competence for students after receiving education on palliative and end-of-life care

content. These findings support the findings of the dissertation study which indicate that education may improve perceived competence in providing palliative and end-of-life care.

Attitudes toward death were measured in this study using the Concerns About Dying instrument. Low internal consistency reliability for this instrument resulted in this variable being excluded from analysis. Pfitzinger Lippe and Becker (2015) similarly found the CAD to have low internal consistency reliability when assessing change in student attitudes over time. Therefore, evidence supports that this instrument may not be appropriate for intervention studies or to assess change over time with groups such as those studies here.

Attitudes toward care of the dying were measured in this study using the Frommelt Attitudes Toward Care of the Dying (FATCOD) instrument. Students in this dissertation study had significant differences across cohorts ($p<.05$), with students further along in the program having more positive attitudes than students earlier in the program. These results are similar to those reported in the literature. Barrere and colleagues similarly (2008) reported that student attitudes improved significantly ($p<.05$) following integration of the ELNEC Core Curriculum throughout a nursing program. Bailey and Hewison (2014), Conner and colleagues (2014), Dobbins (2011), and Mallory (2003) reported significantly improved attitudes ($p<.05$) following the completion of interventions utilizing various teaching strategies. Therefore, the findings of this

dissertation study are similar to those reported in the literature in that education significantly improves attitudes toward care of the dying.

Overall, many of the findings from this dissertation study were the first reports for the variables assessed; therefore, they provide initial evidence from which future research may be conducted to either support or refute the findings. The other findings from this dissertation study were overall very similar to those findings reported in the literature. The methods used in this dissertation study were effective in achieving its aims and generating data to answer the research questions. Next, the strengths and limitations of this dissertation will be discussed.

STRENGTHS AND LIMITATIONS

Study Strengths

There are five overall strengths to this dissertation study: 1) innovation; 2) inclusivity of all students; 3) large faculty member response rate; 4) utility of the unique ID code, and 5) detailed assessment of the curriculum.

Innovation

One of the greatest strengths of this study is that it is the first of its kind to provide a design and test a detailed process for assessing palliative and end-of-life care content within a baccalaureate curriculum. The decomposition method used in this dissertation study was effective in identifying the key components of the ELNEC Core Curriculum. This dissertation study presented the first adaptation of the decomposition method, developed by Borich and Jemelka (1982), to identify all components of the ELNEC Core

Curriculum. The resulting ELNEC Core Curriculum Assessment instrument, completed by faculty, was effective in identifying the teaching strategies used to teach palliative and end-of-life care content as well as the courses within which the content was taught. This same method can be used to identify similar teaching strategies and courses for other topics, provided a gold standard program or curriculum is available for decomposition. If such a curriculum is not available, researchers will need to conduct extensive literature reviews to identify all critical components and then create a similar survey.

This dissertation study was also the first of its kind to use the Palliative Care Curriculum Evaluation Model (PCC), adapted from the Context, Input, Process, and Product (CIPP) Evaluation Model, to guide research. The PCC Evaluation Model was useful in structuring the contexts, inputs, processes, and products for evaluation in this study, catering the content to palliative and end-of-life care content. It was not within the scope of this study to test the model, but rather to use the model to guide the research. Additionally, extant literature primarily focused on the utilization of one teaching strategy related to palliative and end-of-life care education; however, this dissertation study allowed for assessment of nine specific teaching strategies as well as provided an option of an *other* category. The methods and instruments used in this survey provided a detailed assessment of the palliative and end-of-life care education in a curriculum to potentially guide future curricular revisions and teaching strategy development. Therefore, this dissertation study will contribute significantly to palliative and end-of-life care nursing education as well as curriculum evaluation literature.

Inclusivity of All Students

Another strength of this dissertation study is that all students in the baccalaureate program were approached for participation in the study. Pfitzinger Lippe and Carter (2015) reported that most palliative and end-of-life care education research was conducted with students enrolled in elective courses or a select group of students who volunteered to participate in the study. This dissertation invited all students enrolled in the baccalaureate program to participate, therefore allowing assessment of learning outcomes for all students, as opposed to just those who may have an interest in palliative and end-of-life care. The only students excluded from analysis in this dissertation study were those who were repeating a course as they may have had prior exposure to the content in the course during their prior enrollment. The inclusivity of all students added to the extant literature as it provides information about learning outcomes for all levels of students, not just those interested in palliative and end-of-life care.

Large Faculty Member Response Rate

A third strength of this dissertation study was the large faculty response rate. In total, 33 of the 42 eligible faculty members participated in the faculty member survey. This represents a 78% response rate. Although not all faculty members participated in the study, at least one faculty member teaching in each course in the baccalaureate program completed the survey, allowing for an analysis of teaching content within all course in the program. Having all courses represented allowed for a more comprehensive assessment of the baccalaureate curriculum to be conducted in this dissertation study.

Utility of the Unique ID Code

In this dissertation study, a self-generated unique identification code was used to allow for tracking of student responses across all three time points without requiring students to report their names, thereby providing anonymity. The unique ID code was effective in tracking student responses, but required the assistance of a data management expert to link the student responses. The findings of this dissertation add to the body of current research as they provide support for a strategy to allow for student anonymity to be preserved while allowing their responses to be tracked in longitudinal or repeat-measures studies.

Detailed Assessment of the Curriculum

The final strength of the dissertation study was that the methods allowed for a detailed assessment of the curriculum to be conducted. The dissertation study allowed for all identified aspects of palliative and end-of-life care education to be assessed within a baccalaureate program. The findings of the assessment allowed for identification of gaps, strengths, and redundancies in the curriculum. Due to the detailed assessment, future revisions and refinements to the palliative and end-of-life care curriculum can be proposed to address the gaps and redundancies in the program. This dissertation study adds to the extant literature as it provides data from one baccalaureate program regarding palliative and end-of-life care education. These findings can be compared to results from future, similar research, to identify consistent gaps in palliative and end-of-life care education so that appropriate, targeted teaching strategies can be developed and tested.

Study Limitations

There were seven main limitations to this dissertation study: 1) missing responses; 2) unclear specificity of faculty responses; 3) planned teaching was reported; 4) high student response attrition; 5) evaluation methods not assessed in depth; 6) limited in-class observation; and 7) limited generalizability.

Missing Responses

As previously mentioned, high faculty member response rates allowed for all courses to be assessed in the curriculum, allowing for a detailed assessment of the curriculum to be conducted. However, not all faculty members participated in the survey. As a result, responses from faculty members teaching other sections from the same course were used to represent the entire course. Therefore, not all teaching of all faculty members was captured in the results. There is a likelihood that some faculty members teach their course sections differently, and these differences were not captured in the results. Future research studies can take additional efforts to obtain responses from all faculty members, such as a more detailed description of the study, in-person invitations to participate in the study, or administrative support for participating in the study.

Unclear Specificity of Faculty Responses

As has been previously discussed, many of the content areas within the *Pain Management* and *Symptom Management* categories were covered in multiple courses. The content areas within these categories address specific patient conditions or nursing interventions. The faculty member survey included instructions for participants to

indicate the palliative and end-of-life care content taught within their respective courses. However, there is a possibility that, when completing the survey, faculty members reported teaching this content in relation to all nursing care, including for acute situations, as opposed to just in relation to palliative and end-of-life care. The manner in which the faculty members were surveyed did not allow for verification that the information reported was specifically related to palliative and end-of-life care content. Future utilizations of the faculty member survey may require reinforcing that content areas are specific to palliative and end-of-life as participants progress through the questions.

Additionally, survey results revealed that 45.5% of faculty members reported never providing palliative care in their practice. The survey question that obtained this information did not have an option for "do not currently provide direct patient care." As a result, there is a possibility that this 45.5% includes faculty members who selected the option to indicate they do not currently practice. Future survey questions should include this option to allow for clearer identification of faculty member clinical experience with providing care to patients in their last six months of life.

Planned Teaching Reported

Another limitation of this study was that only planned teaching for the fall 2015 semester was reported, as opposed to the actual teaching that was performed. Plans for the semester can always change, especially as students' needs, program requirements, or clinical agency limitations require modifications to be made to the course. Future

research can address this limitation be having faculty members complete their surveys at the end of the semester, to capture actual teaching. However, this option would prevent in-class observations from being performed since it would preclude identification of courses within which a large amount of palliative and end-of-life care caught is taught. Another solution is for faculty members to complete their surveys at the beginning and end of the semester to assess planned and implemented teaching for the semester. This option would allow for a more detailed assessment, but would require a greater time commitment on the part of the faculty members. Researchers must carefully weigh each option to determine which is best. Future research can compare the strategies to determine which is best.

Student Response Attrition

A third limitation of this study was the high student attrition from the first to the third survey (82%). There was also some inconsistency as to which survey(s) students completed originally; some students only completed one, some students completed only two, and some completed all three surveys. As a result, the students included in the final sample for this study were only those who had completed at least the first question of the KAT, which was the last instrument in the survey. The KAT had the most incomplete datasets, therefore completing the first question provided at least complete survey responses on all other items. The first survey had to have been completed to allow for the required analyses to be conducted.

Due to the high attrition, the number of student participants precluded the planned mixed-ANOVAs from being calculated. These small sample sizes decreased the power of the samples for statistical analyses and increased the risk for statistical errors and possible selection bias in terms of who chose to respond. As a result, different analyses were required to answer this study's research questions. Future studies need to take steps to increase student response rates, such as providing in-class time for survey completion for all time points, reducing the number of surveys to just two, or providing incentives to participate (extra credit or gift cards, for example).

Finally, as there was no control group for this study, the researcher is unable to attribute any change in student outcomes to the exposure to the palliative and end-of-life content within the curriculum. Future research may warrant the utilization of a control group in order to assess student outcome changes caused by education, particularly in studies aimed at implementing curriculum revision or new teaching strategies.

Evaluation Methods Not Assessed

The final question of the faculty member survey was open-ended and asked faculty members to share any information about evaluation methods for palliative and end-of-life content. The results of this question were not reported in this dissertation study. The one open-ended question would not allow for in-depth analysis of evaluation methods, and would preclude linking evaluation methods to the teaching strategies utilized for each content area. Future studies could address this limitation by asking faculty members to report evaluation methods for each component of the ELNEC Core

Curriculum Assessment, but this would result in a very lengthy survey. The surveys could be separated to decrease fatigue. Careful consideration is needed to determine how to best assess evaluation strategies in future research.

Limited In-Class Observation

Only two class sections were directly observed during the data collection period, resulting in limited field notes for analysis for the *process* evaluation. The findings from the field notes cannot be generalized to all courses in the program, but rather reflect comparisons only of two Ethics Lecture sections. Additional in-class observations are needed in the future, and can be achieved by having additional researchers assist with observations to avoid scheduling conflicts, having earlier identification of target courses to avoid missing opportunities, or broadening criteria for determination of courses for in-class observation.

Limited Generalizability

Every nursing program is unique, regardless of their shared accreditation standards. Students in each nursing program have unique learning needs, the surrounding communities have varying expectations of nursing programs, and university administrations have different standards for their schools. As a result, the findings of this dissertation study cannot be generalized. There were also concerns regarding limited sample sizes for student results, which further compromised the generalizability of the findings of this dissertation study. Furthermore, observed differences in student outcomes may have been attributable to other influences aside from only the palliative and end-of-

life education incorporated within the curriculum. Given the unique nature and attributes of every program, each nursing program will require its own assessment of palliative and end-of-life care education currently being provided. However, as previously mentioned, the primary purpose of this dissertation study was to design and test an evaluation process to assess palliative and end-of-life care integration within baccalaureate nursing program and the process itself is generalizable to other nursing programs.

Next, the implications of this study will be discussed as they address nursing practice, education, policy, and research.

IMPLICATIONS FOR NURSING PRACTICE

As discussed in Chapter 1, nurses currently enter practice with high anxiety in providing palliative and end-of-life care. Much of this anxiety stems from a lack of adequate education on the subject area in their pre-licensure education. This dissertation provided a method for identifying the primary gaps in education regarding palliative and end-of-life care content. By identifying these gaps, revisions to the curriculum can be identified and implemented. New teaching strategies can also be developed and tested to provide education on the missing content. With enhanced education, nurses can enter practice with more positive attitudes and more knowledge and perceived competence in caring for dying patients.

The implications of having better prepared nurses are critical for the nursing profession and for society overall. First, nurses who enter practice having received proper education will be able to provide evidence-based, competent care that allows individuals

who are dying to experience a peaceful death. Furthermore, as more and more nurses decrease their anxiety toward caring for dying patients, they likely will have positive influences on other healthcare providers. As more and more healthcare providers become comfortable and competent in caring for dying patients, the overall fear of death in healthcare can be reduced.

A Gallup Inc. (2013) poll identified that 85% of Americans report nurses as having high or very high honesty and ethical standards, which makes nursing the top rated profession in this area. With this overwhelming societal positive opinion, nurses are looked to by the general public for information and support. If nurses enter practice with better knowledge, attitudes, and perceived competence regarding palliative and end-of-life care, they can use their influence to better advocate for dying patients, engage in meaningful discussions of choices for end-of-life care, and begin to change the way that society views death overall. In a recent blog post, Profet (2016), an emergency room doctor, discussed the dichotomy between how people used to die (in home, comfortable and surrounded by loved ones) and how they die now (in the hospital following the utilization of aggressive resuscitation efforts). Profet's words depict a culture where death is feared and every day new advances in science allow people to live longer, regardless of their quality of life. Healthcare has moved away from allowing death to defying it as much as possible. Nurses can be the change agents that allow our culture to once again accept death as a natural process, and can advocate for individuals to make decisions that coincide with their wishes for their deaths. However, before nurses can redefine practice

and forever change healthcare, education on palliative and end-of-life care is needed so that nurses can be prepared to create change.

IMPLICATIONS FOR NURSING EDUCATION

In order to achieve the possible changes in nursing practice just described, education is needed. There are multiple implications for this dissertation study regarding nursing education.

First, the primary educational implication from this dissertation study is that reforms are needed within baccalaureate curricula to reduce redundancy and increase coverage of missing content. The findings of the dissertation study revealed that more education is needed for topics such as *Final Hours, Loss/Grief/Bereavement* and *Introduction to Palliative Nursing*. These two modules in particular hone in on key aspects of caring for dying patients and their families; thus they are central to the provision of palliative and end-of-life care. Content in the *Ethical Issues* category was covered extensively, and many aspects of *Pain Management* and *Symptom Management* were taught with a great deal of redundancy. Educators and administration need to evaluate curricula to identify gaps, redundancies, and appropriate coverage in order to make appropriate revisions to ensure all aspects of palliative and end-of-life care education are covered in the program. Only by maximizing the education provided can educators maximize the learning of nursing students, thereby developing leaders in the provision of palliative and end-of-life care.

There was much variability as to which practicum course sections did or did not cover the content. Clinical course instructors need to collaborate to ensure there is greater consistency across the curriculum. Greater consistency allows for all nursing students to enter practice having had similar clinical education, particularly during in-class discussions. However, it is unrealistic to expect all students to have uniform education and exposure to palliative and end-of-life care content. Variability in the types of healthcare settings, patient census, and agency administration regulations all can result in some students having more or less opportunities to engage in the direct provision of palliative and end-of-life care in patient care setting. Therefore, other teaching strategies, such as simulation, need to be utilized to ensure consistent education is provided in other courses or during practicum course in-class discussions/debriefing.

Another key implication from this dissertation study is the development and testing of new teaching strategies to address the gaps in education. In February 2016, the AACN endorsed the Palliative CARES – Competencies And Recommendations for Educating undergraduate nursing Students, a update to the 1998 Peaceful Death competency recommendations (AACN, 2016a). These new competencies were developed to align with AACN Essentials. This document highlights the critical need for palliative and end-of-life education in pre-licensure programs since current education is lacking. Palliative CARES should be considered as well in the development of teaching strategies.

In the dissertation study, no student obtained a perfect score on the KAT, indicating remaining gaps in knowledge as areas for improvement. Targeted strategies

can also be developed that address deficiencies consistently identified from student survey results. Rather than expecting large amounts of class time to be made available for the provision of palliative and end-of-life care education, educators and researchers need to begin to test and develop targeted strategies that maximize the efficiency with which the content is taught. For example, Pfitzinger Lippe and Becker (2015) presented a two-hour end-of-life simulation that addressed aspects of communication, interprofessional collaboration, pain management, symptom management, loss, grief, and bereavement, and final hours of life. While not addressing each component within each of these ELNEC Core Curriculum modules, the simulation addressed some of the components. Strategies such as this need to be developed, tested, and implemented to provide educational experiences that are effective, efficient, and consistent for all nursing students.

Finally, educational interventions should also be provided to practicing nurses. The extant literature consistently cites that nurses have anxiety in providing palliative and end-of-life care and that they have beneficial learning outcomes from receiving education on the topic. Once targeted and appropriate strategies have been developed and tested, they need to be adapted and implemented in practice settings so that all nurses can benefit from receiving critically necessary education. These educational endeavors will not only benefit the nurses, but will result in better death experiences for patients and their families.

IMPLICATIONS FOR POLICY

In addition to practice and education implications, this dissertation study also has implications for policy. The most critical policy implication is the refinement of accreditation standards to better reflect the current healthcare trends cited by Teno and colleagues (2013) in which palliative care is being increasingly utilized by Medicare patients. In an aging society, palliative and end-of-life services will be in greater demand; therefore, nurses will be needed to provide the care. As demonstrated in this dissertation study, both national and state accreditation standards have limited objectives focused on any aspect of palliative or end-of-life care. Additionally, the National Council Licensure Examination for Registered Nurses (NCLEX), the certification exam for practicing nurses, addresses palliative and end-of-life care related issues within the Psychosocial Integrity category, which comprises only 9% of the overall exam content (National Council of State Boards of Nursing [NCSBN], 2012). Not only is palliative and end-of-life content addressed in this category, but so is abuse/neglect, therapeutic communication, stress and coping, religious and spiritual influences on health, family dynamics, and mental health issues, to name a few (NCSBN, p. 7). Therefore, nursing candidate sitting for licensure are likely asked very few if any questions about palliative and end-of-life care.

Given the myriad expectations of nursing education, it would be unrealistic to expect all accreditation objectives or licensing exam questions to focus on the subject. However, there appears to be a disconnect between increasing societal demands for palliative and end-of-life care services and the lack of increasing emphasis on this content

in accreditation standards. Accreditation bodies need to reevaluate their current expectations to provide greater inclusion of palliative and end-of-life care objectives. Without a greater emphasis on palliative and end-of-life care from a policy and accreditation perspective, educators lack the support with which to propose curricular changes to incorporate more palliative and end-of-life content into baccalaureate programs. Although educators have a duty to patients, society, and their students to ensure this content is taught to some extent, lack of accreditation standards detracts from the emphasis placed on this critical aspect of nursing care.

Furthermore, accreditation agencies are often at the mercy of state and national governmental expectations and sanctions. In order to facilitate an increasing integration of palliative and end-of-life care content into accreditation standards, better education of policy-makers and advocacy by nurses is needed so that support for these accreditation revisions can be garnered from a legislative perspective. Not only can educational accreditation standards be revised, but healthcare agency accreditation standards can be modified to ensure all practicing nurses also receive better resources for palliative and end-of-life care education. It is critical that change not just be focused on pre-licensure nurses, but also on practicing nurses so that they can receive the necessary education within their organizations to provide competent and knowledgeable palliative and end-of-life care without experiencing high anxiety.

Of note, one set of ELNEC items that was never addressed by any courses related to the care of Veterans. The ELNEC Core Curriculum takes measures to ensure the

palliative and end-of-life care needs of Veterans are met, particularly after the Department of Veterans Affairs contracted with ELNEC to create a curriculum specifically focused on Veteran's needs in 2010 (AACN, 2016b). Given the emphasis placed on this vulnerable population by ELNEC, Veteran's issues are expected to be discussed in regard to palliative and end-of-life care. However, this population was not addressed in the curriculum evaluated. Policy changes are needed, from accreditation and legislative perspectives, to provide greater emphasis on educating nurses to care for this population.

IMPLICATIONS FOR RESEARCH

Finally, there are multiple research implications for this dissertation study. First, future research is needed to assess curricula from multiple baccalaureate programs using the process designed and tested in this dissertation study. Every baccalaureate program will have different gaps, successes, and redundancies in palliative and end-of-life care content taught to students. However, across all curricula there are likely to be consistent gaps in education that would benefit from the development of targeted teaching strategies. Additionally, the evidence about consistent gaps and redundancies can help guide accreditation agency to know which objectives specifically need to be added to standards to ensure the proper improvements are implemented.

A second research implication from this dissertation study is the need to not only assess and describe a curriculum but to also assess associations between student characteristics and learning outcomes, between faculty member characteristics and

content integration, between content integration and student outcomes, and between faculty member characteristics and student outcomes. Large samples, likely from multiple curricula, will be needed to test these associations. However, evidence regarding these associations will provide educators and administrators with the information they need to determine how to maximize palliative and end-of-life care education for nursing students. For example, should future research demonstrate that faculty ELNEC training is associated with better student learning outcomes, then administrators could ensure faculty members teaching this content complete ELNEC training.

Third, more research is needed regarding teaching evaluation strategies regarding palliative and end-of-life care. This dissertation study only focused on content integration and implementation, and did not assess teaching evaluation strategies. More research can further elucidate which strategies are best for identifying student gains in attitudes, perceived competence, and knowledge, aside from the surveys used in this study. Also, this evidence will help educators make appropriate selections of evaluation methods, providing more reliability and validity to their educational interventions.

Fourth, the limitations of the study and the remaining gaps in the literature identified in Chapter 2 that were not addressed in this study need to be addressed in future research. It is not realistic for one study at one time-point to address all the research needs of such a broad topic area as palliative and end-of-life care. Research in this area is critical, and is needed now so that changes to education and practice can be implemented to address the growing demand for palliative and end-of-life care services.

Finally, in-depth analysis of the results of each content area within the ELNEC core curriculum is needed to identify areas for growth and the critical gaps in education. Aside from just assessing a primary category overall, evaluation of each content area is needed to further guide development and testing of appropriate teaching strategies. In the same respect, more testing of each of the individual teaching strategies reported in this study is needed to determine relative effectiveness. Research supporting the utility of one strategy over another can allow educators to make informed, evidence-based decisions regarding the strategies to use to teach the content.

CONCLUSION

The process developed for this dissertation study to assess palliative and end-of-life care content integration within baccalaureate nursing programs successfully worked to achieve the primary aim of this dissertation study. The process developed and tested within this study allowed for detailed identification of the courses within which content is taught as well as by which teaching strategies the education is provided. Furthermore, the newly developed and tested process provided a mechanism by which nursing programs can be assessed to determine their degree of match with the ELNEC Core Curriculum.

The findings of this dissertation study primarily were consistent with some prevailing research, particularly regarding faculty member characteristics, student characteristics, and student outcomes. However, there were inconsistencies between the study findings and research regarding strategies used to teach ELNEC Core Curriculum content. Potential reasons for these inconsistencies were discussed. The study also

identified variability as a potential problem within palliative and end-of-life education, and strategies to increase consistency were proposed. There were several strengths (innovation, inclusivity of all students, large faculty member response rate, utility of the unique ID code and detailed assessment of the curriculum) and limitations (missing faculty member responses, unclear specificity of faculty responses, only planned teaching reported, student attrition, evaluation methods not assessed, limited in-class observation, and limited generalizability) to this study. This study yielded important implications for nursing practice, education, policy and future research.

Educators have a responsibility to train nursing students to provide palliative and end-of-life care to meet the needs of an aging population. Only through education can nursing students be prepared to provide safe, competent, evidence-based, compassionate care that facilitates individuals experiencing a peaceful death. In addition, the findings of this study have paved the way for many future research studies in the field of palliative and end-of-life care education.

APPENDICES

Appendix A

Behavioral Objectives from AACN and Texas BoN
American Association of Colleges of Nursing: The Essentials of Baccalaureate Education for Professional Nursing Practice (2008):
The baccalaureate program prepares the graduate to "implement patient and family care around resolution of end-of-life and palliative care issues, such as symptom management, support of rituals, and respect for patient and family preferences" (p.31).

Differentiated Essential Competencies of Graduates of Texas Nursing Programs (2011):

C.Knoweldge.4.a.: At completion of the program, students will be able to use **"**evidence-based clinical practice guidelines as a basis of interventions to support patients and families throughout the lifespan, including end-of-life care" (p. 41).

C. Clinical Judgments and Behaviors.3.a.: At completion of the program, students will "use current technology and evidence-based information to formulate and modify the nursing plan of care across the lifespan, including end-of-life care" (p. 42).

F. Clinical Judgments and Behaviors.1.b.: At completion of the program, students will be able to "Evaluate need to intervene to stabilize and prevent negative patient outcomes and/or to support end-of-life care" (54).

Appendix B

Behavioral Objectives from ELNEC Competencies and Modules
ELNEC Competencies (AACN, 1998)

By the end of the program, students will be able to:

1. Recognize dynamic changes in population demographics, health care economics, and service delivery that necessitate improved professional preparation for end-of-life care.

2. Promote the provision of comfort care to the dying as an active, desirable, and important skill, and an integral component of nursing care.

3. Communicate effectively and compassionately with the patient, family, and health care team members about end-of-life issues.

4. Recognize one's own attitudes, feelings, values, and expectations about death and the individual, cultural, and spiritual diversity existing in these beliefs and customs.

5. Demonstrate respect for the patient's views and wishes during end-of-life care.

6. Collaborate with interdisciplinary team members while implementing the nursing role in end-of-life care.

7. Use scientifically based standardized tools to assess symptoms (e.g., pain, dyspnea [breathlessness] constipation, anxiety, fatigue, nausea/vomiting, and altered cognition) experienced by patients at the end of life.

8. Use data from symptom assessment to plan and intervene in symptom management using state-of-the-art traditional and complementary approaches.

9. Evaluate the impact of traditional, complementary, and technological therapies on patient- centered outcomes.

10. Assess and treat multiple dimensions, including physical, psychological, social and spiritual needs, to improve quality at the end of life.

11. Assist the patient, family, colleagues, and one's self to cope with suffering, grief, loss, and bereavement in end-of-life care.

12. Apply legal and ethical principles in the analysis of complex issues in end-of-life care, recognizing the influence of personal values, professional codes, and patient

preferences.

13. Identify barriers and facilitators to patients' and caregivers' effective use of resources.

14. Demonstrate skill at implementing a plan for improved end-of-life care within a dynamic and complex health care delivery system.

15. Apply knowledge gained from palliative care research to end-of-life education and care.

ELNEC Module Objectives (AACN, 2015)- By the end of the program, students will :

Module 1: Palliative Nursing Care

1. Describe the role of the nurse in providing quality palliative care for patients across the lifespan.
2. Summarize changes in population demographics, health care economics, and service delivery that necessitate improved professional preparation for palliative care.
3. Describe the philosophy and principles of hospice and palliative care that can be integrated across settings to effect quality care at the end of life.
4. Discuss aspects of assessing physiological, psychological, spiritual, and social domains of quality of life for patients and families facing a life-threatening illness or event.

Module 2: Pain

1. Identify barriers to adequate pain relief at the end of life for patients across the life span.
2. List components of a thorough pain assessment.
3. Describe pharmacological and nonpharmacological therapies used to relieve pain.
4. Discuss the role of the nurse involved with pain assessment and management at the end of life.

Module 3: Symptom Management

1. Identify common symptoms associated with end-of-life processes for patients across the life span.
2. Identify potential causes of symptoms at the end of life.
3. Describe assessment of symptoms at the end of life.
4. Describe interventions that can prevent or diminish symptoms at the end of life.

Module 4: Ethics

1. Discuss ethical issues and dilemmas that may arise in end-of-life/palliative care.
2. Describe specific roles of the nurse in ethical decision-making.
3. Analyze and apply ethical principles utilized in addressing end-of-life/palliative care

dilemmas, including models for case analysis and use of ethics committees.

Module 5: Cultural Considerations at End-of-Life

1. Identify dimensions of culture and the influence of culture on palliative care for patients across the life span.
2. Conduct a cultural assessment of patients facing the end of life
3. Discuss beliefs regarding death and dying held by various cultures.
4. Recognize the value of interdisciplinary care in respecting cultural diversity.

Module 6: Communication

1. Define the importance of ongoing communication with the interdisciplinary team, patient and family throughout an end-of-life process.
2. Identify three factors that influence communication in the palliative care setting
3. Identify communication characteristics that patient/families expect of health care professionals.

Module 7: Loss, Grief & Bereavement

1. Define loss, mourning, grief and bereavement.
2. Provide three interventions that may be appropriate to facilitate normal grief/bereavement.
3. Define personal death awareness and cumulative loss associated with professional caregiving.
4. Identify four systems of support the nurse can access to assist in coping with death anxiety and loss.

Module 8: Final Hours

1. Assess an imminently dying patient and list five physical signs and symptoms of the dying process and three signs of death.
2. Assess physical, psychological, social, and spiritual care needs and interventions for an imminently dying patient and their family.
3. Discuss the role of the palliative care nurse surrounding the death of a patient.

Appendix C

The CIPP Model- Four Types of Evaluation (Stufflebeam, 2000b, p. 302)

	Context Evaluation	Input Evaluation	Process Evaluation	Product Evaluation
Objective	• **To define the institutional/service context** • **To identify the target population and assess its *needs*** • **To identify pertinent area *assets*** and *resource opportunities* for addressing the needs • **To diagnose *problems* underlying the needs** • **To judge whether *goals* are sufficiently responsive to the assessed needs**	• **To identify and assess** *system capabilities* and **alternative service *strategies*** • To closely examine planned *procedures, budgets,* and *schedules* for implementing the chosen strategy	• To identify or predict *defects* in the procedural design or its implementation • To provide information for the programmed decisions • **To record procedural events and activities for later analysis and judgment**	• **To collect descriptions and judgment of *outcomes*** • **To relate outcomes to *goals* and to *context, input* and *process* information** • **To interpret the effort's *merit* and *worth***
Method	• **By using such methods as survey, document review,** secondary data analysis, hearings, interviews, diagnostic tests, systems analysis, and the Delphi technique	• **By *inventorying and analyzing* available human and material resources** • **By using such methods as *literature search*,[and program deconstruction]** *visits to exemplary programs, advocate teams, and pilot trials* **to identify and examine**	• By *monitoring* the activity's potential procedural barriers and remaining alert to unanticipated ones • By obtaining specified *information for programmed decisions* • **By *interviewing* beneficiaries**	• **By operationally defining and *measuring* outcomes** • **By *collecting judgments* of outcomes from stakeholders** • **By performing both *qualitative* and *quantitative analyses*** • **By *comparing outcomes* to assessed needs, goals, and other pertinent standards**

		promising solution strategies • By *critiquing* procedural designs for relevance, feasibility, cost, and economy	***, describing*** **the actual process,** maintaining a *photographic record,* **and continually *interacting* with and observing the activities of staff and beneficiaries**	
Relation to decision making in the change process	• **For deciding on the *setting* to be served** • **For defining *goals* and setting *priorities*** • For surfacing and addressing potential *barriers* to success • **For providing assessed needs as a *basis for judging outcomes***	• For selecting *sources of support* and solution *strategies* • For explicating a sound procedural *design,* including a budget, schedule, and staffing plan • **For providing a *basis for monitoring and judging implementation***	• For *implementing and refining the program design and procedures,* i.e., for effecting *process control* • **For logging the actual process to provide a *basis for judging implementation* and *interpreting outcomes***	• For deciding to *continue, terminate, modify,* or *refocus* a change activity • **For presenting a clear *record of effects* (intended and unintended, positive and negative)** • **For *judging* the effort's merit and worth**

Appendix D

Student Characteristics by Study

	Gender	Age	Ethnicity/ Race	Place of Residence/ Living Situation	Religion/ Religious Beliefs/ Religious Practices	Program of Enrollment	End-of-Life Education/ Education on Death & Dying	Previous Experience Death/Loss	Previous Experience Caring for Dying Persons	Other
Adesina et al. (2014)	X	X[B]							X	
Al Qadire (2014)	X						X			Year in the program
Arslan et al. (2014)	X	X		X	X[C]			X	X[C]	Chose nursing profession of own accord; which knowledge is most important in EOL care; willing to care for a dying patient[C]
Barrere et al. (2008)	X	X[B]				X[D]	X		X[B]	Highest educational degree

										achieved [D]
Beck (1997)									X	
Brajtman et al. (2007)		X					X			Previous education and work experience
Chen et al. (2006)	X	X [E]	X		X [B]			X [E]		Seeing a violent death[B]; being in a situation with imminent personal death; seeing a person die [E]
Chow et al. (2014)	X [C]				X	X [C]		X [C]	X [C]	
Conner et al. (2014)	X	X			X [E]	X	X [E]	X [C]	X[B]	Highest educational degree achieved; present experience with loss
De Witt Jansen et al. (2013)	X	X	X						X	
Fluharty et al. (2012)	X	X	X			X				
Huang et al. (2010)	X	X				X	X	X	X	Completion of

										thanatology course
Iranmanesh et al. (2008)	X	X					X	X[E]	X	Semester of enrollment
Iranmanesh et al. (2010)		X[B]		X	X[B]		X			
Korzeniewska-Eksterowicz et al.(2013)	X			X	X					Have children, parents' education level, medical professional in close family
Kwekkeboom et al. (2005)		X	X				X	X	X	Semester of enrollment
Wochna Loerzel and Conner (2014)	X	X			X	X	X	X	X	
Mutto et al. (2010)	X	X								
Mutto et al. (2012)	X	X								
Parry (2011)		X								Previous healthcare experience
Smith-Stoner et al. (2011)	X	X[C]						X	X[C]	Previous healthcare experience[C]; age of first

										exposure to death[C]; which loved one died in first exposure to death
Wallace et al. (2009)	X	X	X		X		X			
Watts (2014)	X	X								Location where palliative and end-of-life care experience obtained
Weissman (2011)	X		X		X				X	Highest academic degree achieved; experiencing a life-changing illness; family member seriously ill

[A] significant correlation with other demographics ($p<.05$)
[B] significant influence on learning outcomes ($p<.05$)
[C] significant group differences on demographic variable ($p<.05$)
[D] both a and b
[E] both b and c

Appendix E

Student Self-Generated Code

This study will be exploring how the current baccalaureate curriculum prepares students to care for dying patients in their practice. You are being asked to complete a series of three surveys this semester, with the first one being completed today.

To protect your privacy, these surveys will be collected anonymously. In order to link your responses while maintaining your anonymity, please complete the following questions to generate a unique identification code. You will be asked these same questions for every survey, so you do not need to remember this code. Please CAREFULLY answer the following questions.

For this study, palliative care is defined as "patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering. Palliative care throughout the continuum of illness involves addressing physical, intellectual, emotional, social, and spiritual needs and to facilitate patient autonomy, access to information, and choice" (National Consensus Project for Quality Palliative Care, 2013, p. 9).

What was your age in years on September 1, 2015? _____

What is the first letter of your mother's first name? _____

What is the first letter of your father's first name?_____

How many *older brothers* do you have?_____

How many *older sisters* do you have?_____

Does *your* own *first* name begin with a letter in the first half of the alphabet (A-M) or the second half of the alphabet (N-Z)? If A-M, write first; If N-Z write second._____

What is the month in which you were born?_____

What is the first letter of your middle name? If you have no middle initial, write N._____

Enter all answers from the above questions to generate your unique identification code._____

Appendix F

Student Characteristic Information- First Data Collection Time Point

This study will be exploring how the current baccalaureate curriculum prepares students to care for dying patients in their practice. You are being asked to complete a series of three surveys this semester, with the first one being completed today.

For this study, palliative care is defined as "patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering. Palliative care throughout the continuum of illness involves addressing physical, intellectual, emotional, social, and spiritual needs and to facilitate patient autonomy, access to information, and choice" (National Consensus Project for Quality Palliative Care, 2013, p. 9).

In which semester of the baccalaureate nursing program are you currently enrolled?

- pre-nursing
- J1
- J2
- S1
- S2

PRENURSING- Which courses are you currently enrolled in (mark all that apply)?				
	Currently Enrolled		Previously Enrolled	
	YES	NO	YES	NO
N309 Global Health				
N321 Ethics of Health Care Settings				
N310 Communication in Health Care Settings				

J1- Which courses are you currently enrolled in (mark all that apply)?				
	Currently Enrolled		Previously Enrolled	
	YES	NO	YES	NO
N224 Health Assessment Skills				
N325 Adult Health Nursing I (Lecture)				
N325P Adult Health Nursing I (Practicum)				
N264 Nursing Research				
N227 Conceptual Bases of Aging				

N127P Clinical Nursing Skills I (Practicum)				
N354 Spanish for Health Care Professionals				

J2- Which courses are you currently enrolled in (mark all that apply)?				
	Currently Enrolled		Previously Enrolled	
	YES	NO	YES	NO
N455 Adult Health Nursing II (Lecture)				
N356 Mental Health Nursing Across the Lifespan (Lecture)				
N355P Adult Health Nursing II (Practicum)				
N356P Problems in Mental Health Nursing (Practicum)				
N157P Clinical Nursing Skills II				
N354 Spanish for Health Care Professionals				

S1- Which courses are you currently enrolled in (mark all that apply)?							
	Currently Enrolled		Previously Enrolled		Which part of the semester?		
	YES	NO	YES	NO	First Half	Second Half	Whole
N278 Contemporary Nursing Practice							
N323 Genetics in Health Care							
N265 Nursing Care of Childbearing Families (Lecture)							
N365P Nursing Care of							

Childbearing Families (Practicum)							
N266 Nursing Care of Children and Families (Lecture)							
N366P Nursing Care of Children & Families (Practicum)							

S2- Which courses are you currently enrolled in (mark all that apply)?				
	Currently Enrolled		Previously Enrolled	
	YES	NO	YES	NO
N275 Public Health Nursing				
N375P Public Health Nursing (Practicum)				
N377 Clinical Care Management (Practicum)				
N377 Leadership & Management of Nursing Care				
N279P Capstone Preceptorship				

Please provide information about any previous experiences you have had with the death of a loved one/friend/pet. If you have not had any experiences, write "none" in the first blank under relationship and then progress to the next question.

	Relationship	Years since death	Nature of experience with death		Nature of experience with death Other (describe)
			Observation	Care Provider	
Individual 1			○	○	
Individual 2			○	○	
Individual 3			○	○	
Individual 4			○	○	

Please provide information about any experiences caring for patients who were dying (</= 6 months to live). Select all that apply). If you have not had any experiences, select "student nurse" for the row labeled "none".

	Role			Involvement		Timing	
	Nurse Aide/Tech	Volunteer	Student Nurse	Observation	Active Provider	Before UTSON	During UTSON
Patient 1	☐	☐	☐	☐	☐	☐	☐
Patient 2	☐	☐	☐	☐	☐	☐	☐
Patient 3	☐	☐	☐	☐	☐	☐	☐
Patient 4	☐	☐	☐	☐	☐	☐	☐
None	☐	☐	☐	☐	☐	☐	☐

	Full academic course dedicated to the subject	Learned content in other courses not dedicated to the subject	No previous education
Previous palliative care or end-of-life care education (select all that apply)	☐	☐	☐

	Catholic	Protestant	Jewish	Muslim	Hindu	Atheist	None	Other	Prefer not to Answer
Religious Affiliation If other, record in space provided.	○	○	○	○	○	○	○		○

Student Characteristic Information- Second Data Collection Time Point

This study will be exploring how the current baccalaureate curriculum prepares students to care for dying patients in their practice. You are being asked to complete your second of three surveys this semester. As you did previously, please complete the following questions to generate a unique identification code. Please write your code at the top of each page. You will be asked these same questions for your final survey, so you do not need to remember this code. Please CAREFULLY answer all of the following questions. Please note that you may need to scroll right to see all possible answer choices.

For this study, palliative care is defined as "patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering. Palliative care throughout the continuum of illness involves addressing physical, intellectual, emotional, social, and spiritual needs and to facilitate patient autonomy, access to information, and choice" (National Consensus Project for Quality Palliative Care, 2013, p. 9).

Please provide information about any new experiences you have had with the death of a loved one/friend/pet since the beginning of the semester. If you have not had any new experiences, write "none" in the first blank under relationship and then progress to the next question.

	Relationship	Nature of experience with death		Nature of experience with death
		Observation	Care Provider	Other (describe)
Individual 1		○	○	
Individual 2		○	○	
Individual 3		○	○	
Individual 4		○	○	

Please provide information about any new experiences caring for patients who were dying (</= 6 months to live) since the beginning of the semester (select all that apply). If you have not had any new experiences, select "student nurse" for the row labeled "none".

	Role			Involvement	
	Nurse Aide/Tech	Volunteer	Student Nurse	Observation	Active Provider
Patient 1	□	□	□	□	□
Patient 2	□	□	□	□	□
Patient 3	□	□	□	□	□
Patient 4	□	□	□	□	□
None	□	□	□	□	□

	Care of the Dying Simulation?	
	Yes	No

In any of the courses in which you are currently enrolled, have you completed a simulation in which you have provided care for a dying patient? If you select yes, please indicate in which course in the space provided. _____	○	○

Student Characteristic Information- Third Data Collection Time Point

This study will be exploring how the current baccalaureate curriculum prepares students to care for dying patients in their practice. You are being asked to complete your final survey for this semester. As you did previously, please complete the following questions to generate a unique identification code. Please write your code at the top of each page. Please CAREFULLY answer the following questions. Please note you may need to scroll right to see all possible answer choices.

For this study, palliative care is defined as "patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering. Palliative care throughout the continuum of illness involves addressing physical, intellectual, emotional, social, and spiritual needs and to facilitate patient autonomy, access to information, and choice" (National Consensus Project for Quality Palliative Care, 2013, p. 9).

Please provide information about any new experiences you have had with the death of a loved one/friend/pet since the middle of the semester. If you have not had any new experiences, write "none" in the first blank under relationship and then progress to the next question.

	Relationship	Nature of experience with death Observation	Care Provider	Nature of experience with death Other (describe)
Individual 1		○	○	
Individual 2		○	○	
Individual 3		○	○	
Individual 4		○	○	

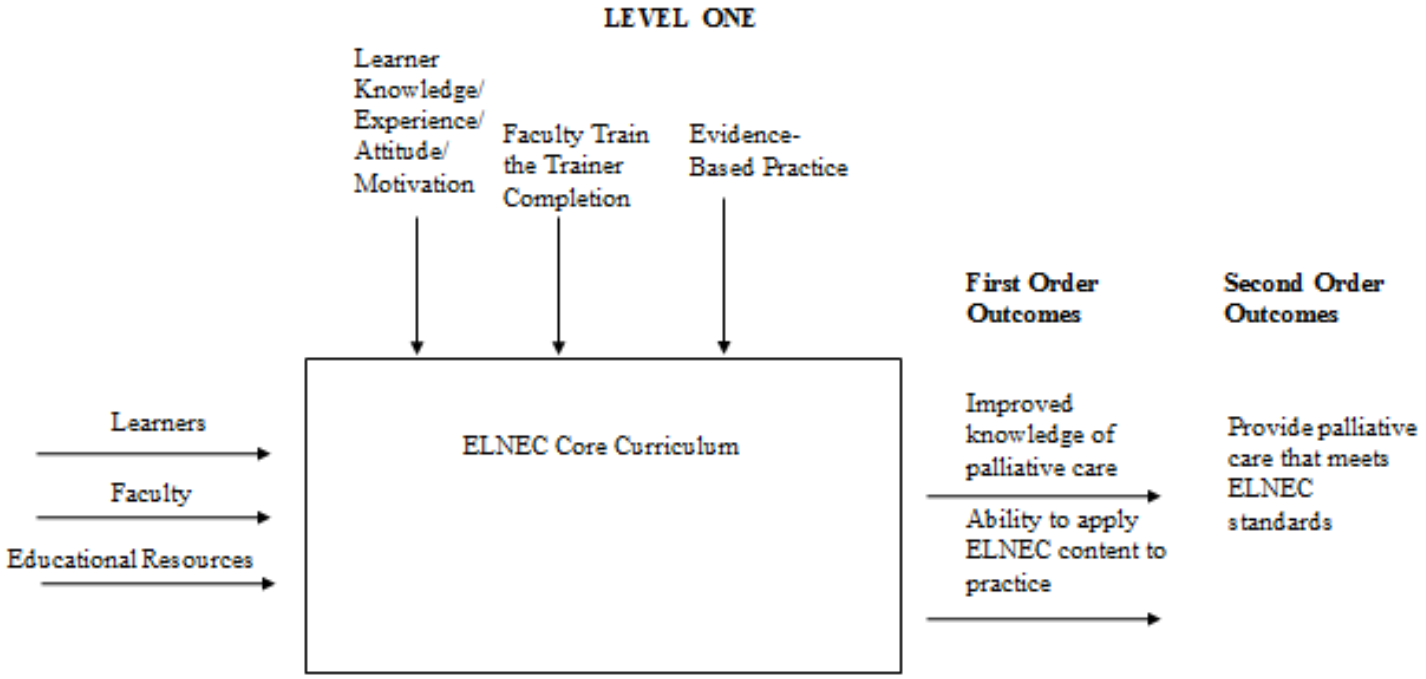
Please provide information about any new experiences caring for patients who were dying (</= 6 months to live) since the middle of the semester. Select all that apply). If you have not had any new experiences, select "student nurse" for the row labeled "none".

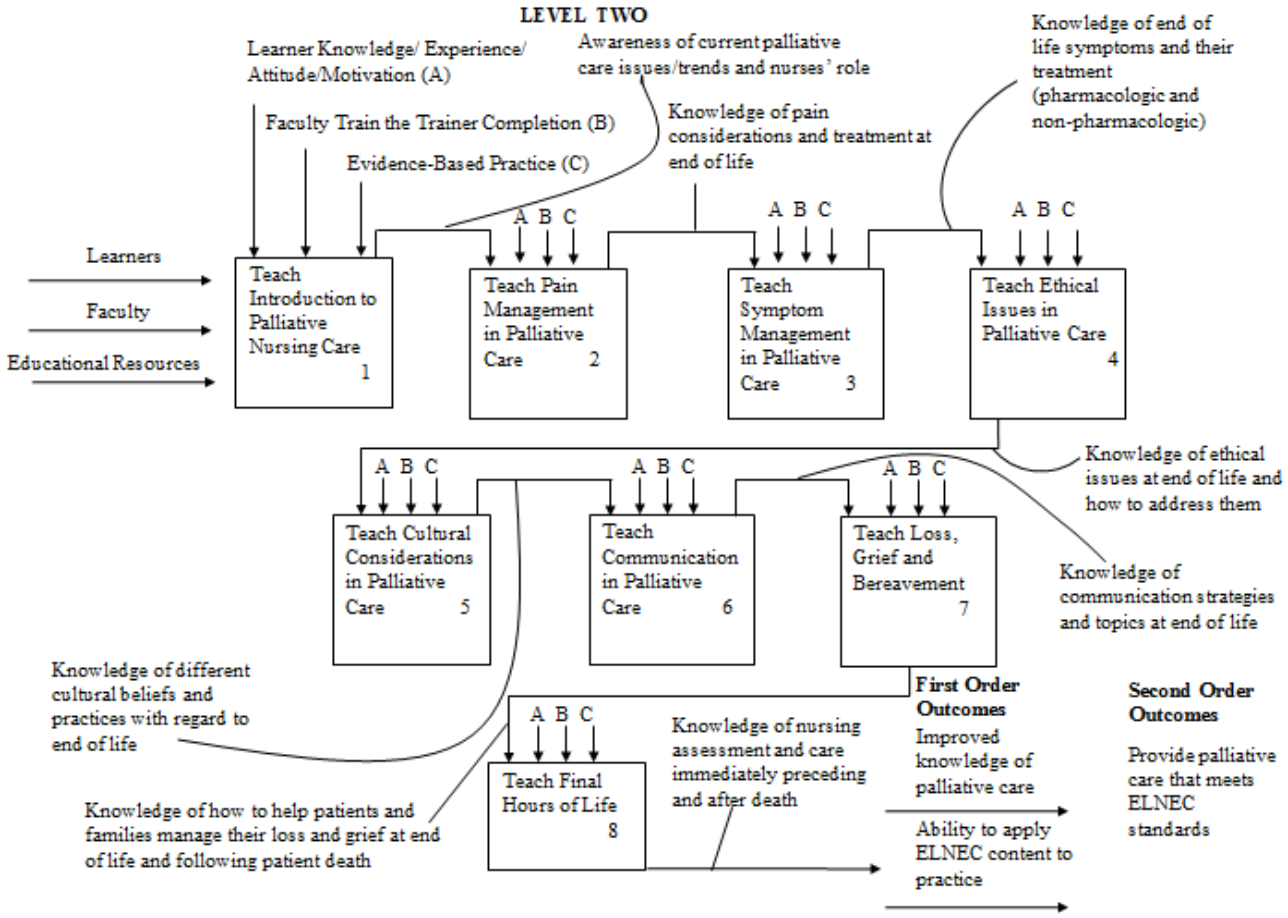
	Role Nurse Aide/Tech	Volunteer	Student Nurse	Involvement Observation	Active Provider
Patient 1	□	□	□	□	□
Patient 2	□	□	□	□	□
Patient 3	□	□	□	□	□
Patient 4	□	□	□	□	□
None	□	□	□	□	□

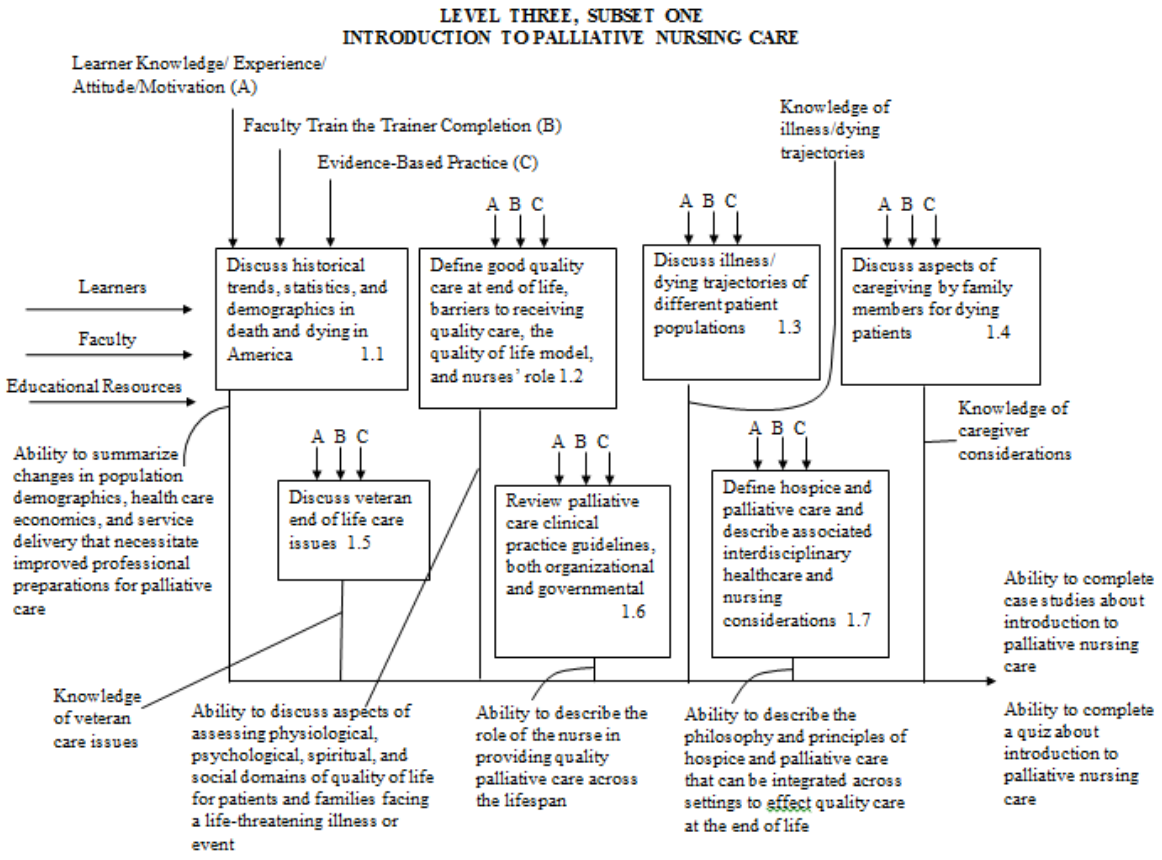
	Care of the Dying Simulation? Yes	No
In any of the courses in which you are currently enrolled, have you completed a simulation in which you have provided care for a dying patient? If you select yes, please indicate in which course in the space provided. _____	○	○

Appendix G

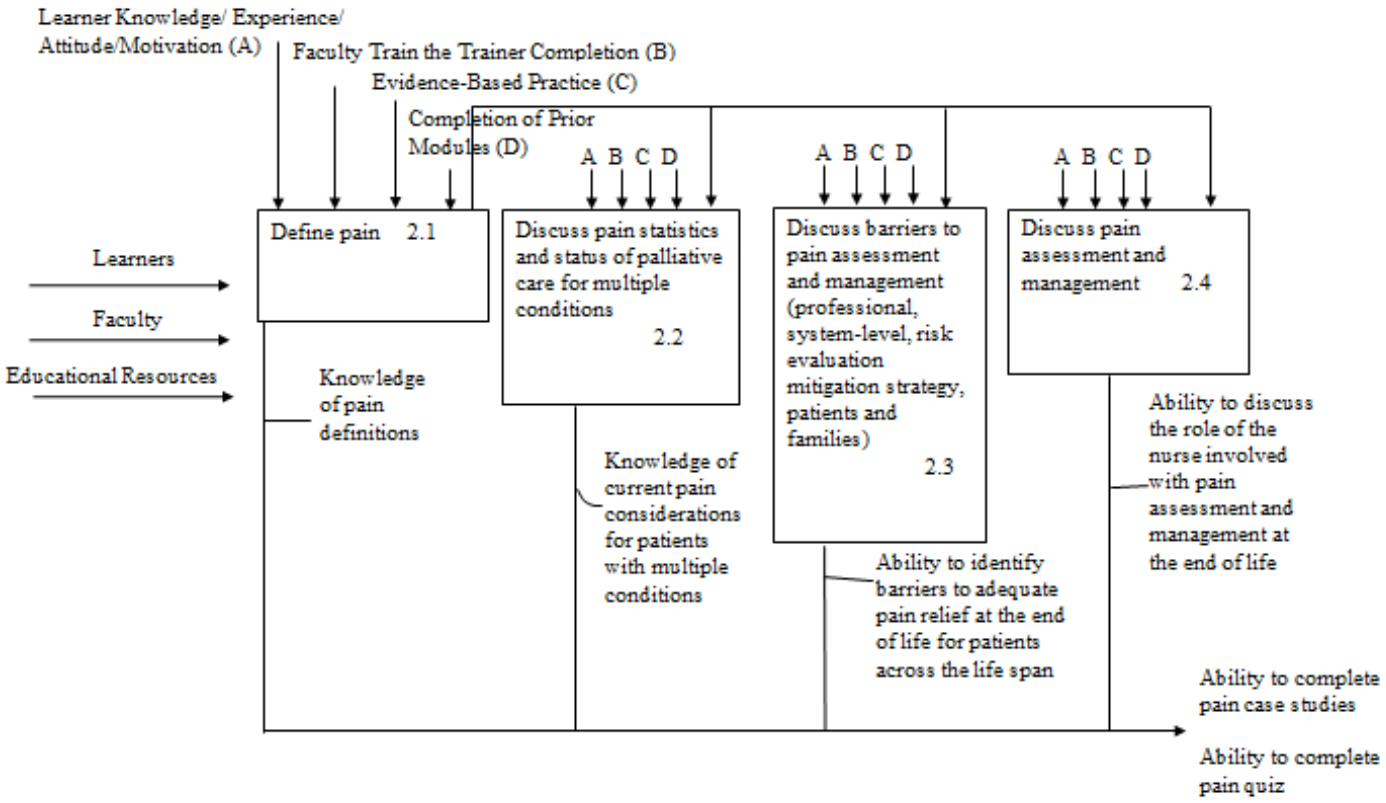
ELNEC Core Curriculum Decomposition



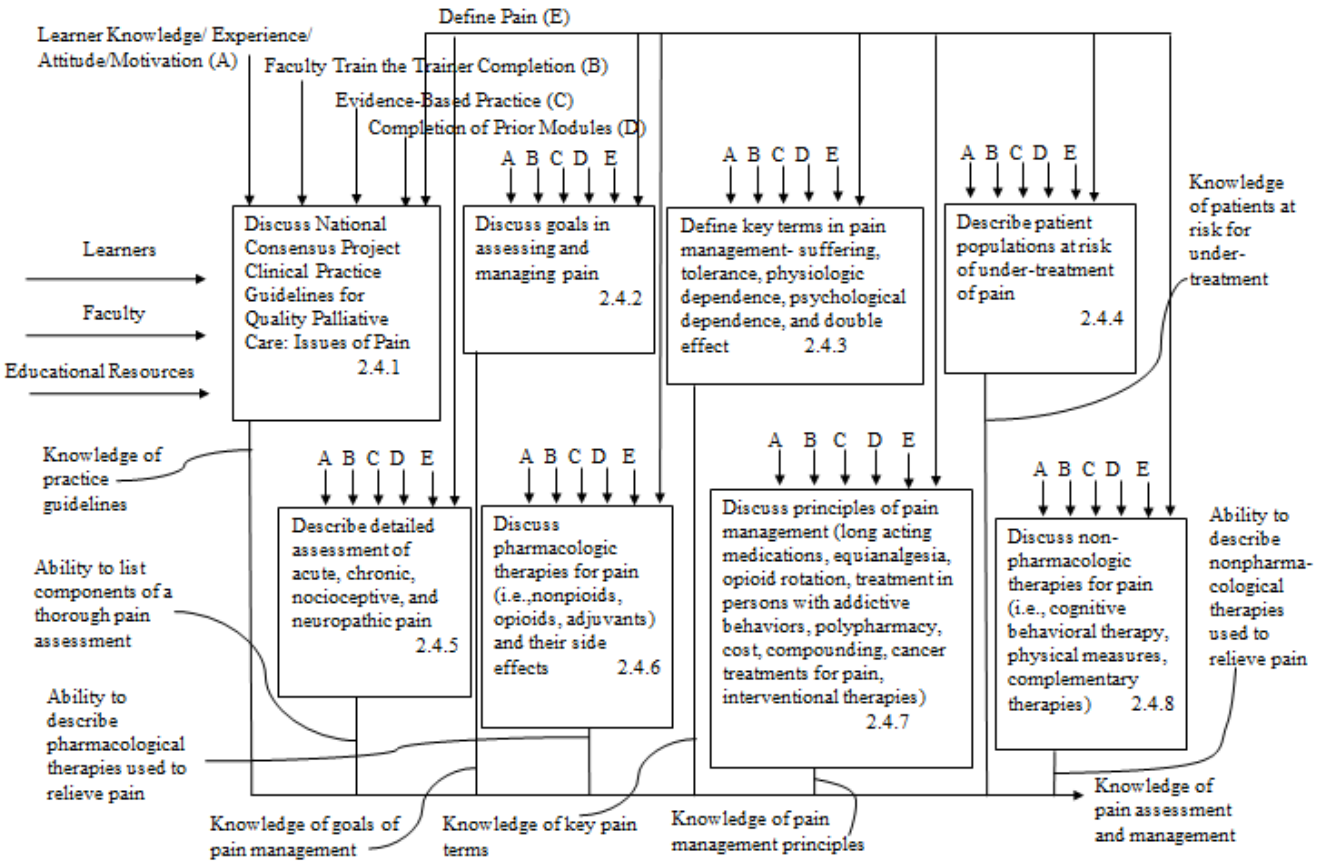

LEVEL TWO
Learner Knowledge/ Experience/ Attitude/Motivation (A)
Awareness of current palliative care issues/trends and nurses' role
Knowledge of end of life symptoms and their treatment (pharmacologic and non-pharmacologic)
Faculty Train the Trainer Completion (B)
Knowledge of pain considerations and treatment at end of life
Evidence-Based Practice (C)
A B C
A B C
A B C
Learners
Faculty
Educational Resources
Teach Introduction to Palliative Nursing Care 1
Teach Pain Management in Palliative Care 2
Teach Symptom Management in Palliative Care 3
Teach Ethical Issues in Palliative Care 4
Knowledge of ethical issues at end of life and how to address them
A B C
A B C
A B C
Teach Cultural Considerations in Palliative Care 5
Teach Communication in Palliative Care 6
Teach Loss, Grief and Bereavement 7
Knowledge of communication strategies and topics at end of life
Knowledge of different cultural beliefs and practices with regard to end of life
First Order Outcomes
Improved knowledge of palliative care
Ability to apply ELNEC content to practice
Second Order Outcomes
Provide palliative care that meets ELNEC standards
A B C
Knowledge of nursing assessment and care immediately preceding and after death
Teach Final Hours of Life 8
Knowledge of how to help patients and families manage their loss and grief at end of life and following patient death

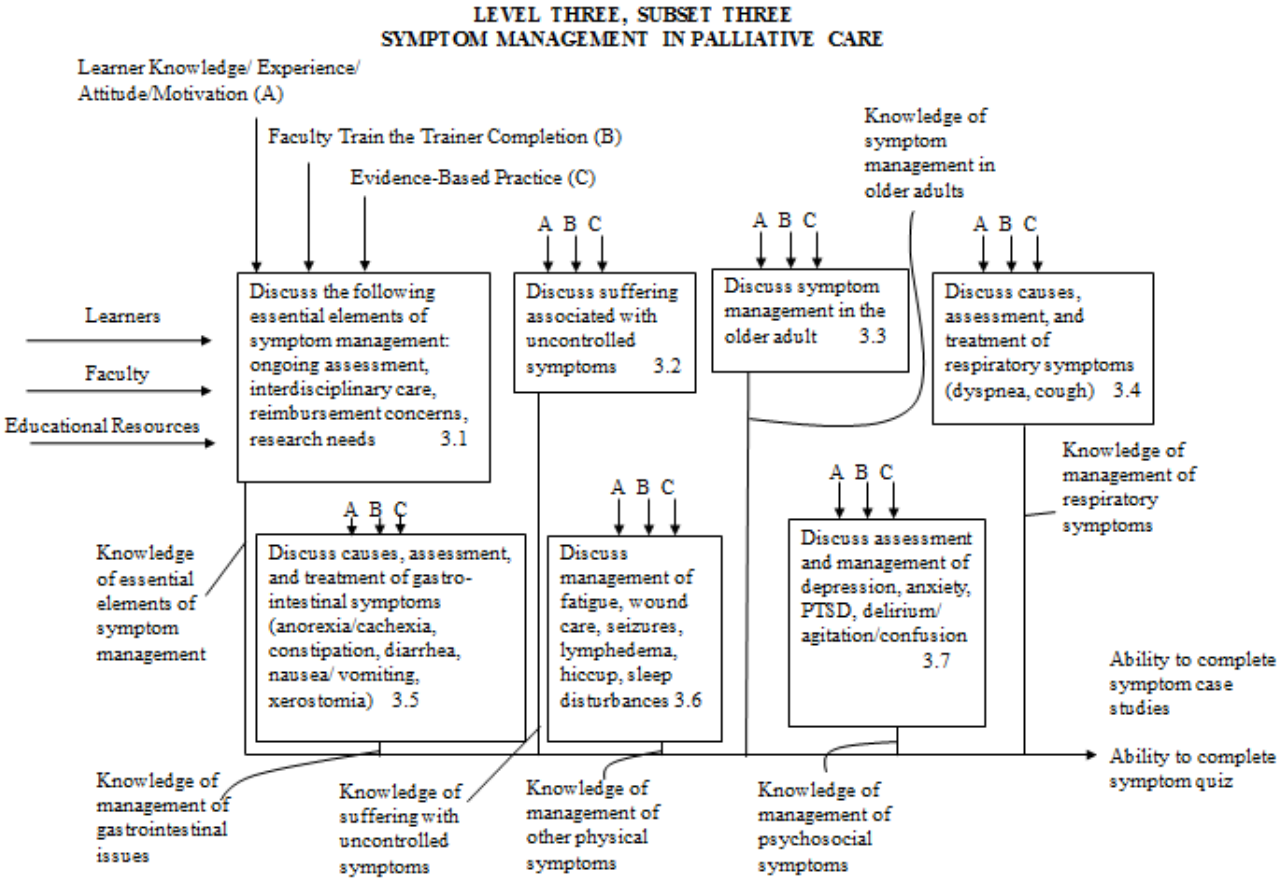

LEVEL THREE, SUBSET ONE
INTRODUCTION TO PALLIATIVE NURSING CARE
Learner Knowledge/ Experience/ Attitude/Motivation (A)
Faculty Train the Trainer Completion (B)
Evidence-Based Practice (C)
Knowledge of illness/dying trajectories
A B C
A B C
A B C
Learners
Faculty
Educational Resources
Discuss historical trends, statistics, and demographics in death and dying in America 1.1
Define good quality care at end of life, barriers to receiving quality care, the quality of life model, and nurses' role 1.2
Discuss illness/ dying trajectories of different patient populations 1.3
Discuss aspects of caregiving by family members for dying patients 1.4
Knowledge of caregiver considerations
Ability to summarize changes in population demographics, health care economics, and service delivery that necessitate improved professional preparations for palliative care
A B C
A B C
A B C
Discuss veteran end of life care issues 1.5
Review palliative care clinical practice guidelines, both organizational and governmental 1.6
Define hospice and palliative care and describe associated interdisciplinary healthcare and nursing considerations 1.7
Ability to complete case studies about introduction to palliative nursing care
Ability to complete a quiz about introduction to palliative nursing care
Knowledge of veteran care issues
Ability to discuss aspects of assessing physiological, psychological, spiritual, and social domains of quality of life for patients and families facing a life-threatening illness or event
Ability to describe the role of the nurse in providing quality palliative care across the lifespan
Ability to describe the philosophy and principles of hospice and palliative care that can be integrated across settings to effect quality care at the end of life

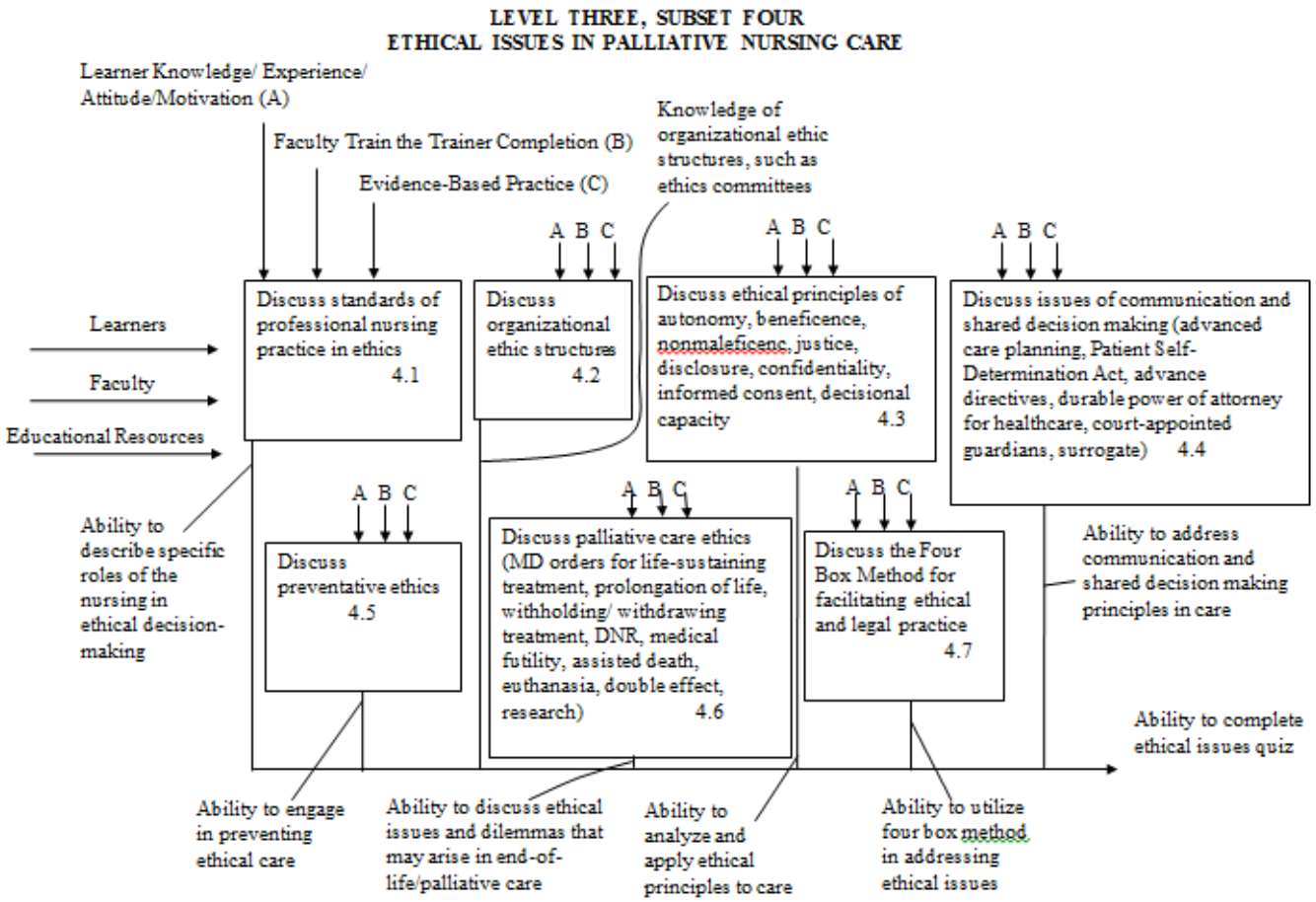
LEVEL THREE, SUBSET TWO
PAIN MANAGEMENT IN PALLIATIVE CARE

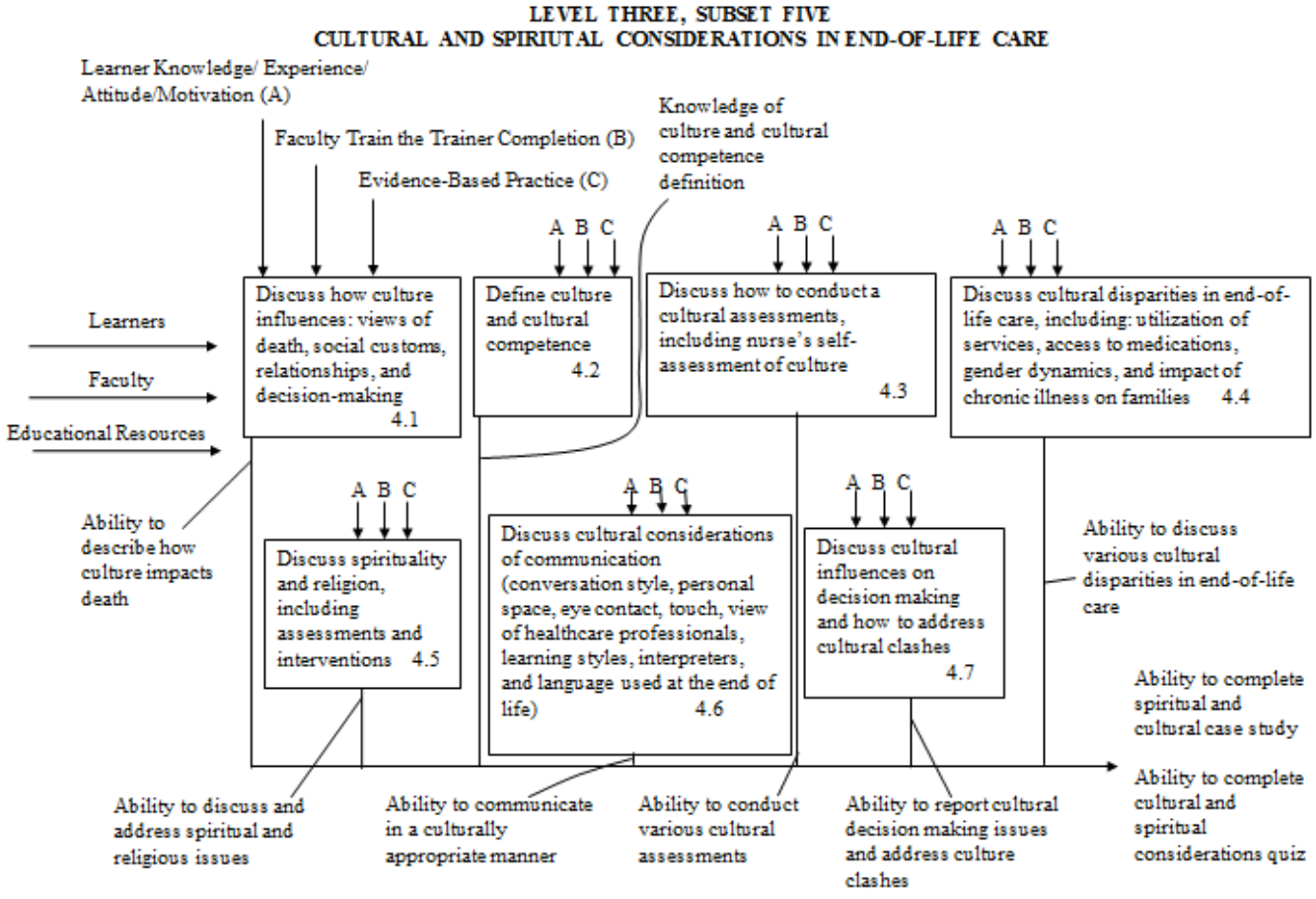


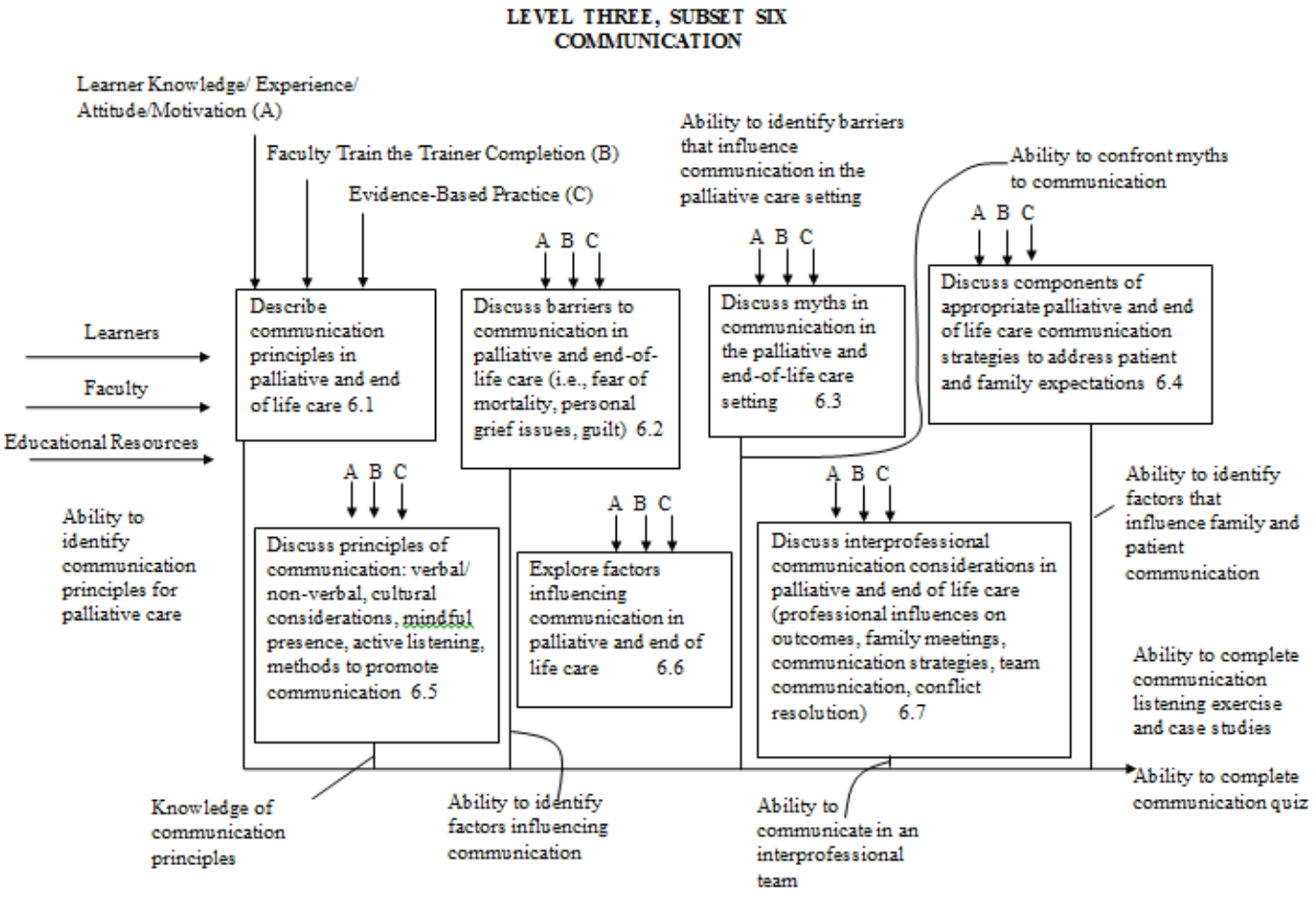
LEVEL THREE, SUBSET TWO, SUBCATEGORY FOUR
CLINICAL PRACTICE GUIDELINES FOR QUALITY PALLIATIVE CARE

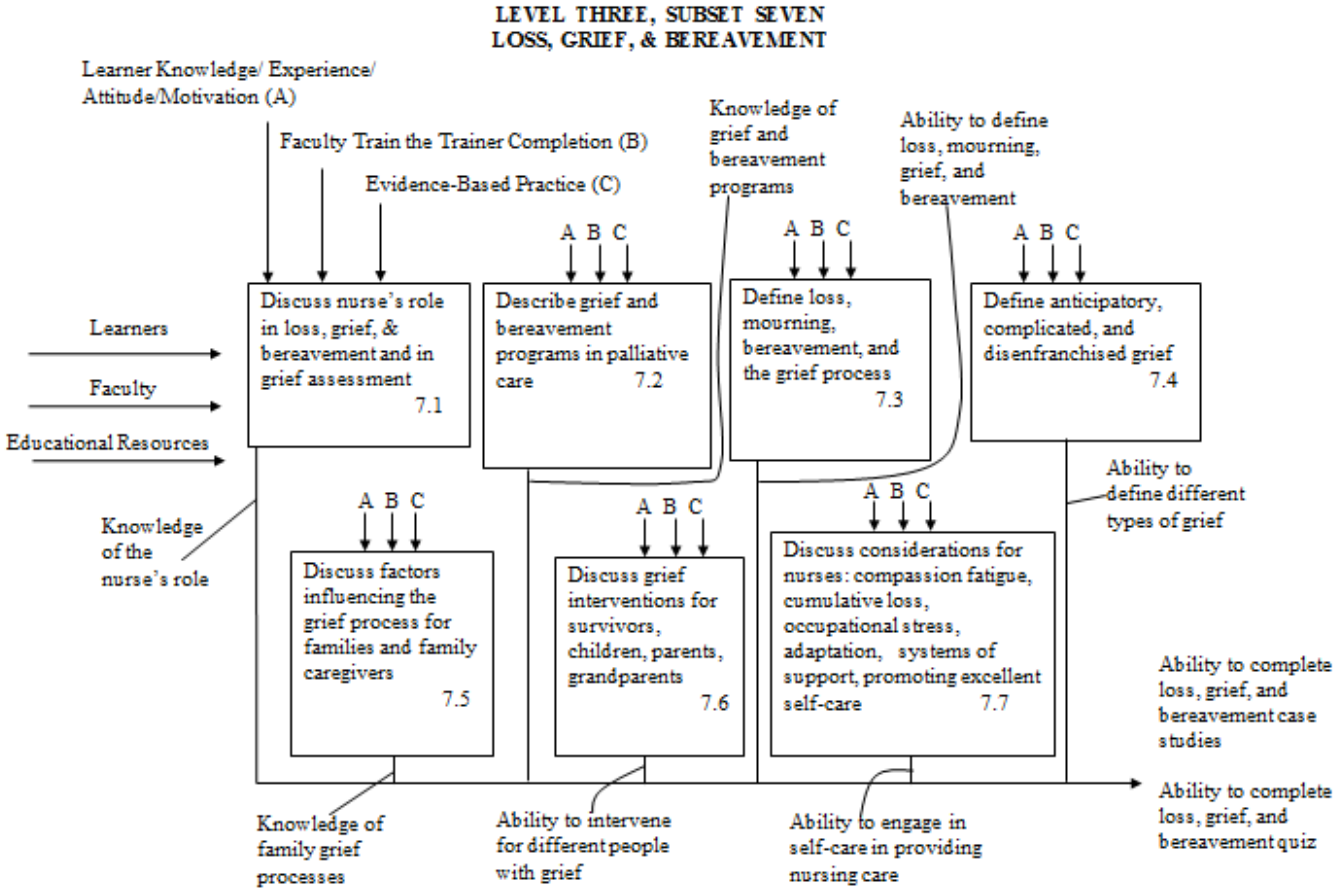


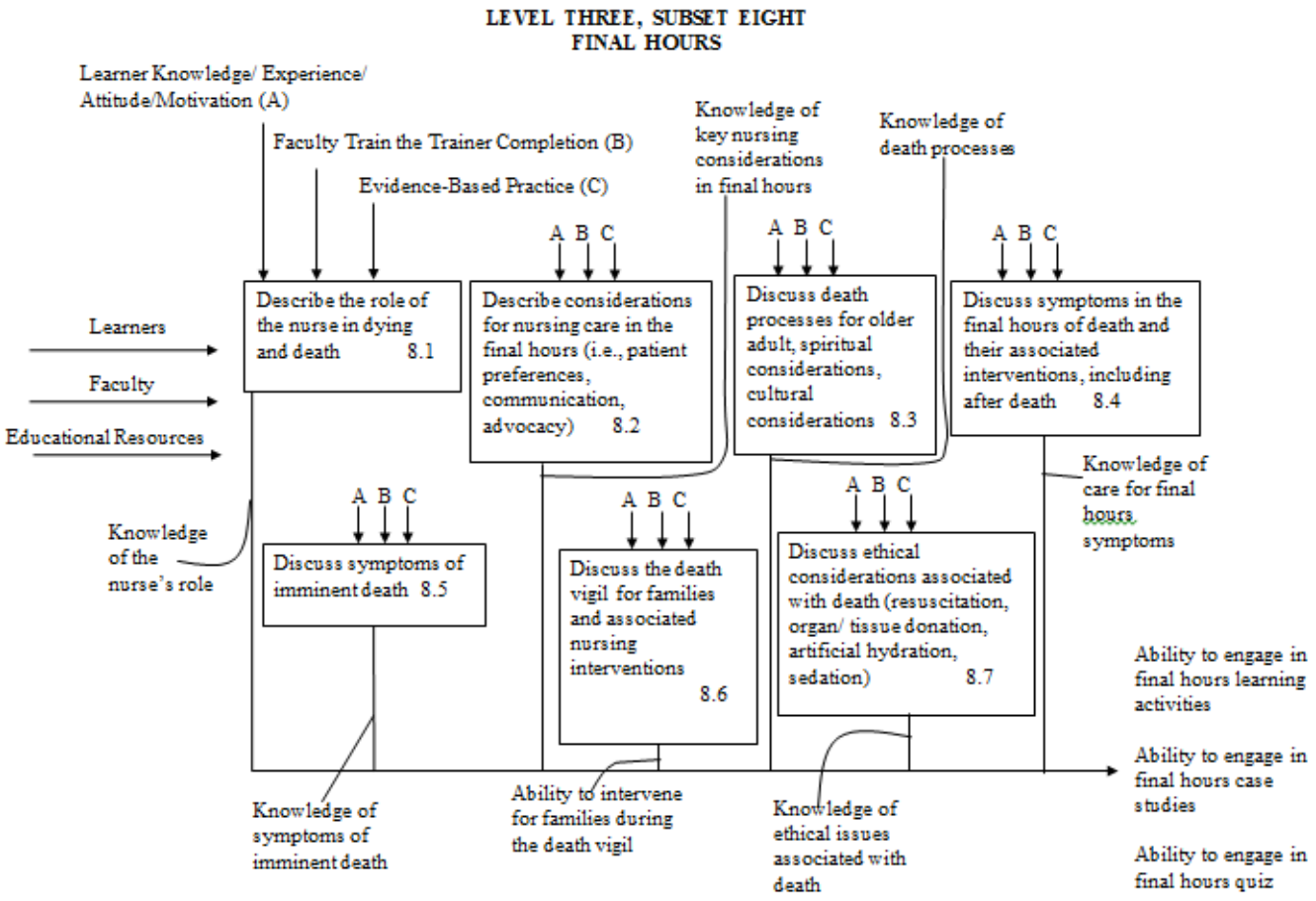

LEVEL THREE, SUBSET THREE
SYMPTOM MANAGEMENT IN PALLIATIVE CARE
Learner Knowledge/ Experience/ Attitude/Motivation (A)
Faculty Train the Trainer Completion (B)
Evidence-Based Practice (C)
Knowledge of symptom management in older adults
A B C
Learners
Faculty
Educational Resources
Discuss the following essential elements of symptom management: ongoing assessment, interdisciplinary care, reimbursement concerns, research needs 3.1
Discuss suffering associated with uncontrolled symptoms 3.2
Discuss symptom management in the older adult 3.3
Discuss causes, assessment, and treatment of respiratory symptoms (dyspnea, cough) 3.4
Knowledge of management of respiratory symptoms
Knowledge of essential elements of symptom management
Discuss causes, assessment, and treatment of gastro-intestinal symptoms (anorexia/cachexia, constipation, diarrhea, nausea/ vomiting, xerostomia) 3.5
Discuss management of fatigue, wound care, seizures, lymphedema, hiccup, sleep disturbances 3.6
Discuss assessment and management of depression, anxiety, PTSD, delirium/ agitation/confusion 3.7
Ability to complete symptom case studies
Ability to complete symptom quiz
Knowledge of management of gastrointestinal issues
Knowledge of suffering with uncontrolled symptoms
Knowledge of management of other physical symptoms
Knowledge of management of psychosocial symptoms


LEVEL THREE, SUBSET FOUR
ETHICAL ISSUES IN PALLIATIVE NURSING CARE
Learner Knowledge/ Experience/ Attitude/Motivation (A)
Faculty Train the Trainer Completion (B)
Evidence-Based Practice (C)
Knowledge of organizational ethic structures, such as ethics committees
A B C
Learners
Faculty
Educational Resources
Discuss standards of professional nursing practice in ethics 4.1
Discuss organizational ethic structures 4.2
Discuss ethical principles of autonomy, beneficence, nonmaleficenc, justice, disclosure, confidentiality, informed consent, decisional capacity 4.3
Discuss issues of communication and shared decision making (advanced care planning, Patient Self-Determination Act, advance directives, durable power of attorney for healthcare, court-appointed guardians, surrogate) 4.4
Ability to describe specific roles of the nursing in ethical decision-making
Discuss preventative ethics 4.5
Discuss palliative care ethics (MD orders for life-sustaining treatment, prolongation of life, withholding/ withdrawing treatment, DNR, medical futility, assisted death, euthanasia, double effect, research) 4.6
Discuss the Four Box Method for facilitating ethical and legal practice 4.7
Ability to address communication and shared decision making principles in care
Ability to complete ethical issues quiz
Ability to engage in preventing ethical care
Ability to discuss ethical issues and dilemmas that may arise in end-of-life/palliative care
Ability to analyze and apply ethical principles to care
Ability to utilize four box method in addressing ethical issues


LEVEL THREE, SUBSET FIVE
CULTURAL AND SPIRIUTAL CONSIDERATIONS IN END-OF-LIFE CARE
Learner Knowledge/ Experience/ Attitude/Motivation (A)
Faculty Train the Trainer Completion (B)
Evidence-Based Practice (C)
Knowledge of culture and cultural competence definition
A B C
A B C
A B C
Learners
Faculty
Educational Resources
Discuss how culture influences: views of death, social customs, relationships, and decision-making 4.1
Define culture and cultural competence 4.2
Discuss how to conduct a cultural assessments, including nurse's self-assessment of culture 4.3
Discuss cultural disparities in end-of-life care, including: utilization of services, access to medications, gender dynamics, and impact of chronic illness on families 4.4
Ability to describe how culture impacts death
A B C
A B C
A B C
Discuss spirituality and religion, including assessments and interventions 4.5
Discuss cultural considerations of communication (conversation style, personal space, eye contact, touch, view of healthcare professionals, learning styles, interpreters, and language used at the end of life) 4.6
Discuss cultural influences on decision making and how to address cultural clashes 4.7
Ability to discuss various cultural disparities in end-of-life care
Ability to complete spiritual and cultural case study
Ability to complete cultural and spiritual considerations quiz
Ability to discuss and address spiritual and religious issues
Ability to communicate in a culturally appropriate manner
Ability to conduct various cultural assessments
Ability to report cultural decision making issues and address culture clashes


LEVEL THREE, SUBSET SIX
COMMUNICATION
Learner Knowledge/ Experience/ Attitude/Motivation (A)
Faculty Train the Trainer Completion (B)
Evidence-Based Practice (C)
Learners
Faculty
Educational Resources
Ability to identify communication principles for palliative care
A B C
Describe communication principles in palliative and end of life care 6.1
A B C
Discuss principles of communication: verbal/ non-verbal, cultural considerations, mindful presence, active listening, methods to promote communication 6.5
Knowledge of communication principles
A B C
Discuss barriers to communication in palliative and end-of-life care (i.e., fear of mortality, personal grief issues, guilt) 6.2
A B C
Explore factors influencing communication in palliative and end of life care 6.6
Ability to identify factors influencing communication
Ability to identify barriers that influence communication in the palliative care setting
A B C
Discuss myths in communication in the palliative and end-of-life care setting 6.3
A B C
Discuss interprofessional communication considerations in palliative and end of life care (professional influences on outcomes, family meetings, communication strategies, team communication, conflict resolution) 6.7
Ability to communicate in an interprofessional team
Ability to confront myths to communication
A B C
Discuss components of appropriate palliative and end of life care communication strategies to address patient and family expectations 6.4
Ability to identify factors that influence family and patient communication
Ability to complete communication listening exercise and case studies
Ability to complete communication quiz


LEVEL THREE, SUBSET SEVEN
LOSS, GRIEF, & BEREAVEMENT
Learner Knowledge/ Experience/ Attitude/Motivation (A)
Faculty Train the Trainer Completion (B)
Evidence-Based Practice (C)
Knowledge of grief and bereavement programs
Ability to define loss, mourning, grief, and bereavement
A B C
A B C
A B C
Learners
Faculty
Educational Resources
Discuss nurse's role in loss, grief, & bereavement and in grief assessment 7.1
Describe grief and bereavement programs in palliative care 7.2
Define loss, mourning, bereavement, and the grief process 7.3
Define anticipatory, complicated, and disenfranchised grief 7.4
Ability to define different types of grief
Knowledge of the nurse's role
A B C
A B C
A B C
Discuss factors influencing the grief process for families and family caregivers 7.5
Discuss grief interventions for survivors, children, parents, grandparents 7.6
Discuss considerations for nurses: compassion fatigue, cumulative loss, occupational stress, adaptation, systems of support, promoting excellent self-care 7.7
Ability to complete loss, grief, and bereavement case studies
Ability to complete loss, grief, and bereavement quiz
Knowledge of family grief processes
Ability to intervene for different people with grief
Ability to engage in self-care in providing nursing care


LEVEL THREE, SUBSET EIGHT
FINAL HOURS
Learner Knowledge/ Experience/ Attitude/Motivation (A)
Faculty Train the Trainer Completion (B)
Evidence-Based Practice (C)
Knowledge of key nursing considerations in final hours
Knowledge of death processes
A B C
Learners
Faculty
Educational Resources
Describe the role of the nurse in dying and death 8.1
Describe considerations for nursing care in the final hours (i.e., patient preferences, communication, advocacy) 8.2
Discuss death processes for older adult, spiritual considerations, cultural considerations 8.3
Discuss symptoms in the final hours of death and their associated interventions, including after death 8.4
Knowledge of care for final hours symptoms
Knowledge of the nurse's role
Discuss symptoms of imminent death 8.5
Discuss the death vigil for families and associated nursing interventions 8.6
Discuss ethical considerations associated with death (resuscitation, organ/ tissue donation, artificial hydration, sedation) 8.7
Ability to engage in final hours learning activities
Ability to engage in final hours case studies
Ability to engage in final hours quiz
Knowledge of symptoms of imminent death
Ability to intervene for families during the death vigil
Knowledge of ethical issues associated with death

Appendix H

Faculty Member Characteristic Information

This dissertation study will explore how the current baccalaureate curriculum prepares students to care for dying patients prior to entering their practice. As part of my study, you, as a faculty member assigned to teach a baccalaureate nursing course, are being asked to complete the following survey. The survey will assess what palliative and end-of-life-care content is taught within our baccalaureate curriculum and the methods used to teach this content. I will also be assessing faculty characteristics to be able to describe our faculty members who teach in the baccalaureate nursing program. Please read each question carefully and answer as accurately as possible. Please note that you will need to scroll right to view all answer choices.

For this study, palliative care is defined as "patient and family-centered care that optimizes quality of life by anticipating, preventing, and treating suffering. Palliative care throughout the continuum of illness involves addressing physical, intellectual, emotional, social, and spiritual needs and to facilitate patient autonomy, access to information, and choice" (National Consensus Project for Quality Palliative Care, 2013, p. 9).

Please provide your name and email address below.
_____

Credentials_____

Number of years practicing in direct patient care_____

Number of years teaching in academic nursing education programs_____

Number of years teaching baccalaureate nursing education courses_____

Certifications.					
If you have others, please list them in the space provided below.	Certified Hospice and Palliative Nurse	Certified Nurse Educator	Oncology Certified Nurse	Gerontological Nursing	None
	□	□	□	□	□

Have you ever completed the End of Life Nursing Education Consortium Train-the-Trainer course? YES NO

To what extent is your area of research related to palliative or end-of-life care?
Not at all Mildly Moderately Strongly Exclusively I do not conduct research

In your clinical practice, how often did you provide palliative care for patients in their final 6 months of life?	Daily	Weekly	Monthly	A few times per year	Never
	○	○	○	○	○

Please select all pre-nursing courses you are assigned to teach for the fall 2015.			
Prenursing	N309 Global Health	N321 Ethics of Health Care Settings	N310 Communication in Healthcare Settings
	☐	☐	☐

Please select all J1 courses you are assigned to teach for the fall 2015.							
J1	N224 Health Assessment Skills	N325 Adult Health Nursing I (Lecture)	N325P Adult Health Nursing I (Practicum)	N254 Nursing Research	N227 Conceptual Bases of Aging	N127P Clinical Nursing Skills I (Practicum)	N354 Spanish for Healthcare Professionals
	☐	☐	☐	☐	☐	☐	☐

Please select all J2 courses you are assigned to teach for the fall 2015.					
J2	N455 Adult Health Nursing II (Lecture)	N356 Mental Health Nursing Across the Lifespan (Lecture)	N355P Adult Health Nursing II (Practicum)	N356P Problems in Mental Health Nursing (Practicum)	N157P Clinical Nursing Skills II
	☐	☐	☐	☐	☐

Please select all S1 courses you are assigned to teach for the fall 2015.						
S1	N279 Contemporary Nursing Practice	N323 Genetics in Health Care	N265 Nursing Care of Childbearing Families	N365P Nursing Care of Childbearing Families (Practicum)	N266 Nursing Care of Children & Families (Lecture)	N366P Nursing care of Children & Families (Practicum)

	□	□	□	□	□	□

Please select all S2 courses you are assigned to teach for the fall 2015.					
S2	N275P Public Health Nursing (Lecture)	N375P Public Health Nursing (Practicum)	N377P Clinical Care Management (Practicum)	N377 Leadership & Management of Nursing Care	N279P Capstone Preceptorship
	□	□	□	□	□

Appendix I

The following sections of the survey pertain to specific instructional content related to palliative care and the teaching strategies used to teach this content. For each identified area of instructional content please indicate the teaching strategy used by placing the course number (e.g. N286) in the corresponding box. If you teach the content in more than one course, place all course numbers in the corresponding box. If you do not teach the content in any course place an X in the last column.

Introduction to Palliative Nursing Care

	Lecture	Case Study	Simulation	Small Group Discussion	Essay	Personal Reflection/ Journaling	Readings	Films	Clinical Conference Discussion/ Debriefing	Other (explain)	Do not teach this content
Historical trends in death and dying in America											
Statistics regarding death and dying in America											
Demographic information regarding death and dying in America											
Definition of good quality care at the											

end of life											
Barriers to patients receiving good quality care at the end of life											
Quality of life model (physical, psychological, social, and spiritual quality of life)											
Nurses' role in providing good quality care at the end of life											
Illness/dying trajectories											
Definition of hospice											
Definition of palliative care											
Current practice of hospice and palliative care											
Ideal continuum of care for disease management											

and palliative care											
Burden for caregivers at the end of life											
Cost to caregivers at the end of life											
Commitment of caregivers at the end of life											
Who are the caregivers for individuals at the end of life											
Rates of death for Veterans											
Location of death for Veterans											
Lifestyle concerns for Veterans											
Lack of insurance for Veterans											
National Consensus Project for Quality Palliative Care											
National											

Quality Forum											
The Joint Commission: Advanced Certification in Palliative Care											
Report to Congress: National Strategy for Quality Improvement in Healthcare											
Hospice Medicare benefits											
Nursing care expectations in hospice or palliative care											
Assessment tools for palliative care											
Prognostic tools and qualifications for hospice											
Future directions for palliative care											

Pain Management in Palliative Care

	Lecture	Case Study	Simulation	Small Group Discussion	Essay	Personal Reflection/ Journaling	Readings	Films	Clinical Conference Discussion/ Debriefing	Other (explain)	Do not teach this content
Definition of pain											
Goals in assessing and managing pain											
Communicating pain assessment findings											
Suffering and existential distress associated with pain											
Interdisciplinary care as critical element of pain management											
Regular and ongoing assessment as critical element of pain management											
Keeping pain											

at acceptable levels as critical element of pain management											
Documenting response as critical element of pain management											
Identifying and addressing barriers as critical element of pain management											
Implementing a risk management plan for controlled substances as critical element of pain management											
Considering culture as critical element of pain											

management											
Educating the family/caregiver as critical element of pain management											
Addressing suffering as critical element of pain management											
Referring to providers with specialized skill as critical element of pain management											
Pain statistics for cancer											
Pain statistics for HIV/AIDS											
Pain statistics for other chronic conditions											
Pain statistics for other acute conditions											

Status of palliative care for cancer											
Status of palliative care for HIV/AIDS											
Status of palliative care for other chronic conditions											
Status of palliative care for other acute conditions											
Professional barriers to conducting pain assessments											
System-level barriers to conducting pain assessments											
Risk evaluation mitigation strategy for pain assessments											
Patient barriers to											

conducting pain assessments											
Family barriers to conducting pain assessments											
Definition of suffering											
Definition of tolerance											
Definition of physiologic dependence											
Definition of psychological dependence											
Definition of double effect											
Definition of acute pain											
Definition of chronic pain											
Definition of nocioceptive pain											
Definition of neuropathic pain											
Definition of acute on chronic pain											
Risk of											

under-treatment of pain in children											
Risk of under-treatment of pain in older adults											
Risk of under-treatment of pain in patient who deny pain											
Risk of under-treatment of pain in non-English speaking individuals											
Risk of under-treatment of pain in different cultures											
Risk of under-treatment of pain in individuals with a history of addictive											

disease											
Assessing response of different types of pain to interventions											
Assessing etiology of pain											
Assessing type of pain											
Assessing description of pain											
Assessing location of pain											
Assessing meaning of pain											
Assessing impact of pain on quality of life											
Assessing cultural considerations for pain											
Assessing medical history regarding pain											

Assessing psychosocial history in relation to pain											
Assessing substance use history											
Assessing pain during physical examination											
Assessing pain during functional assessment											
Laboratory/Diagnostic evaluations associated with assessing pain											
Pain reassessment											
Nonopioid pain management											
Opioid pain management											
Antidepressant medications as adjuvant pain intervention											
Anticonvulsa											

nt as adjuvant pain intervention											
Local anesthetics as adjuvant pain intervention											
Corticosteroids as adjuvant pain intervention											
Route of medication administration											
Nebulized and sublingual opioids											
Adverse effects of nonopioid medications											
Adverse effects of opioid medications											
Adverse effects of antidepressant medications											
Adverse effects of anticonvulsant medications											

Adverse effects of local anesthetics											
Adverse effects of corticosteroids											
Cognitive behavioral therapy as nonpharmacologic pain intervention											
Heat therapy as nonpharmacologic pain intervention											
Cold therapy as nonpharmacologic pain intervention											
Massage as nonpharmacologic pain intervention											
Complimentary therapies for nonpharmacologic pain intervention											
Radiation											

therapy as pain intervention											
Chemotherapy as pain intervention											
Hormonal therapy as pain intervention											
Bisphosphates as pain intervention											
Surgery as pain intervention											
Neurolytic blocks as pain intervention											
Neuroablative procedures as pain intervention											
Vertebroplasty/ kyphoplasty as pain intervention											
Principle of use of long acting pain medications											
Principle of equianalgesia											

Principle of opioid rotation											
Principle of polypharmacy											
Principle of cost of pain management											
Principle of compounding											
Treating pain in person with addictive behaviors											

Symptom Management in Palliative Care

	Lecture	Case Study	Simulation	Small Group Discussion	Essay	Personal Reflection/ Journaling	Readings	Films	Clinical Conference Discussion/ Debriefing	Other (explain)	Do not teach this content
Ongoing assessment as critical element of symptom management											
Interdisciplinary care as critical element of symptom management											
Reimbursement concerns for symptom management											

Research needs for symptom management											
Suffering associated with uncontrolled symptoms											
Symptom management in older adults											
Causes of dyspnea											
Assessment of dyspnea											
Treatments/ interventions for dyspnea											
Causes of cough											
Assessment of cough											
Treatments/ interventions for cough											
Causes of anorexia/ cachexia											
Assessment of anorexia/ cachexia											
Treatments/ interventions for anorexia/ cachexia											
Causes of											

constipation											
Assessment of constipation											
Treatments/ interventions for constipation											
Causes of diarrhea											
Assessment of diarrhea											
Treatments/ interventions for diarrhea											
Causes of nausea/ vomiting											
Assessment of nausea/ vomiting											
Treatments/ interventions for nausea/ vomiting											
Causes of xerostomia											
Assessment of xerostomia											
Treatments/ interventions for xerostomia											
Causes of fatigue											
Assessment of fatigue											

Treatments/ interventions for fatigue											
Causes of wounds											
Assessment of wounds											
Treatments/interventions for wounds											
Causes of seizures											
Assessment of seizures											
Treatments/ interventions for seizures											
Causes of lymphedema											
Assessment of lymphedema											
Treatments/ interventions for lymphedema											
Causes of hiccup											
Assessment of hiccup											
Treatments/ interventions for hiccup											
Causes of sleep disturbances											
Assessment of											

sleep disturbances											
Treatments/ interventions for sleep disturbances											
Causes of depression											
Assessment of depression											
Treatments/ interventions for depression											
Causes of anxiety											
Assessment of anxiety											
Treatments/ interventions for anxiety											
Causes of PTSD											
Assessment of PTSD											
Treatments/ interventions for PTSD											
Causes of delirium/ agitation/ Confusion											
Assessment of delirium/ agitation/ Confusion											

Treatments/ interventions for delirium/ agitation/ confusion											

Ethical Issues in Palliative Nursing Care

	Lecture	Case Study	Simulation	Small Group Discussion	Essay	Personal Reflection/ Journaling	Readings	Films	Clinical Conference Discussion/ Debriefing	Other (explain)	Do not teach this content
Standards of professional nursing practice in ethics											
Organizational ethic structures (such as ethics committees)											
Preventative ethical practices											
The Four Box Method for facilitating ethical and legal practice											
Autonomy											
Beneficence											
Nonmaleficence											
Justice											
Disclosure											
Confidentiality											
Informed											

consent											
Decisional capacity											
Advanced care planning											
Patient Self-Determination Act											
Advance directives											
Durable power of attorney for health care											
Court-appointed guardians											
Surrogate decision maker											
Physician orders for life-sustaining treatment											
Prolongation of life											
Withholding/Withdrawing treatment											
DNR											
Medical futility											
Assisted death											
Euthanasia											
Principle of double effect-"Last Dose Syndrome"											

Research regarding palliative care ethics											

Cultural and Spiritual Considerations in End-of-Life Care

	Lecture	Case Study	Simulation	Small Group Discussion	Essay	Personal Reflection/ Journaling	Readings	Films	Clinical Conference Discussion/ Debriefing	Other (explain)	Do not teach this content
Definition of culture											
Definition of cultural competence											
Components of cultural competence											
Tools for cultural or spiritual assessment (such as FICA-Faith, Importance/ Influence, Community, Address)											
Self-assessment of culture											
Cultural influences on views of death											

Cultural influences on social customs											
Cultural influences on relationships											
Cultural influences on decision-making											
Assessing culture of the patient/family/ community											
Assessing religion/ spirituality											
Assessing food preferences											
Assessing cultural economic situations											
Assessing various health beliefs about death											
Assessing various health beliefs about health care											
Cultural considerations of disparities in end-of-life care											

Cultural considerations of vulnerable populations											
Cultural considerations of spirituality and religion											
Cultural considerations of spiritual care interventions											
Cultural communication considerations											
Cultural considerations of language used at the end-of-life											
Cultural and spiritual considerations of interdisciplinary interventions											
Cultural considerations of the role of the family											
Culture-Treatment clash											

Communication

	Lecture	Case Study	Simulation	Small Group Discussion	Essay	Personal Reflection/ Journaling	Readings	Films	Clinical Conference Discussion/ Debriefing	Other (explain)	Do not teach this content
Principle that terminal illness is a family experience											
Principle that professionals need to impart information so individuals may make informed decisions											
Principle that palliative care requires interdisciplinary collaboration											
Barriers to communication in palliative and end-of-life care											
Myths in communication in palliative and end-of-life care											
Components of appropriate palliative and end-of-life care communication											

strategies to address patient and family expectations											
Verbal/non-verbal communication											
Cultural considerations of communication											
Mindful presence											
Active listening											
Methods to promote communication											
Considerations of family system changes on palliative and end-of-life communication											
Considerations of financial uncertainties on palliative and end-of-life communication											
Considerations of physical limitations on palliative and end-of-life communication											
Interprofessional communication											

influences on outcomes											
Family meetings											
Interprofessional communication strategies											
Team communication											
Conflict resolution											

Loss, Grief, and Bereavement

	Lecture	Case Study	Simulation	Small Group Discussion	Essay	Personal Reflection/ Journaling	Readings	Films	Clinical Conference Discussion/ Debriefing	Other (explain)	Do not teach this content
Nurse's role in loss, grief, and bereavement											
Nurse's role in grief assessment											
Grief and bereavement programs in palliative care											
Factors influencing the grief process of families and family caregivers											
Definition of loss											
Definition of mourning											
Definition of											

bereavement											
Definition of the grief process											
Definition of anticipatory grief											
Definition of complicated grief											
Definition of disenfranchised grief											
Special grief interventions for survivors											
Special grief interventions for children											
Special grief interventions for parents											
Special grief interventions for grandparents											
Compassion fatigue in nursing											
Cumulative loss in nursing											
Occupational stress in nursing											
Adaptation in nursing											
Systems of support in nursing											
Promoting											

excellent self-care in nursing											

Final Hours

	Lecture	Case Study	Simulation	Small Group Discussion	Essay	Personal Reflection/ Journaling	Readings	Films	Clinical Conference Discussion/ Debriefing	Other (explain)	Do not teach this content
The role of the nurse in death and dying											
Patient preferences in the final hours											
Communication in the final hours											
Advocacy in the final hours											
Psychological considerations in the final hours											
Emotional considerations in the final hours											
Death processes for older adults											
Spiritual consideration in death process											
Cultural consideration in death process											
Symptoms of imminent death											

Death vigil for families											
Interventions for families in their death vigil											
Nursing care after death											
Confusion/ Disorientation/ Delirium vs. Unconsciousness in final hours											
Drowsiness and Sleeping vs. Restlessness/ Agitation in final hours											
Weakness and Fatigue vs. Surge of Energy in final hours											
Fever in final hours											
Bowel changes in final hours											
Incontinence in final hours											
Decreased intake in final hours											
Pain in final hours											
Interventions for pain in final hours											

Interventions for myoclonus in final hours											
Interventions for death rattle in final hours											
Ethical considerations of resuscitation											
Ethical considerations of organ/tissue donation											
Ethical considerations of artificial hydration											
Palliative sedation at the end-of-life											

Please briefly describe any methods you will be using in the fall 2015 baccalaureate-level courses to evaluate learning outcomes related to palliative and end-of-life care.

Appendix J

ELNEC Knowledge Assessment Test (Lange, Shea, Grossman, Wallace, & Ferrell, 2009)
Each multiple choice item has one correct answer.

Q1 The nurse is developing the content for an interdisciplinary discussion on the concept of healing. Which of the following statements should be included?

Healing is a medical outcome and is most appropriately directed by physicians.
Healing can occur only after the client's spiritual issues have been resolved with a chaplain.
Healing is possible if attention is paid to the multiple dimensions that influence a person's quality of life.
Healing occurs when the patient and family realize and accept when cure is not possible.

Q2 The nurse is discussing aspects of suffering with the wife of a client. The client is dying from complications related to acquired immune deficiency syndrome (AIDS). Which of the following statements indicates that the nurse understands the concept of suffering?

"Most people have multiple sources of suffering."
"Suffering leads to finding a deeper meaning in life."
"You will be able to determine what is causing your husband's suffering."
"Your husband's suffering is related to the amount of pain he experiences."

Q3 The nurse is caring for a 48-year-old woman recently diagnosed with breast cancer. The client is married and has 3 small children. Which of the following is the best time to begin a spiritual assessment?

when the patient enters the health care system
after chemotherapy is initiated
once the patient asks for spiritual support
as soon as the client begins to deteriorate

Q4 The nurse is orienting a new staff member on a unit that cares for many patients at the end of life. Which of the following comments by the nurse correctly reflects a principle of palliative care?

"We're busy because most people prefer to die in a hospital rather than at home where they would be a burden."

"Death and dying are not discussed much here in order to maintain hope for patients and families."

"Because our patients often are uncomfortable, they need physical care more than psychological or spiritual care."

"Patients are eligible for palliative care even though they are also receiving curative treatment."

Q5 The nurse is rightfully concerned with the suffering that patients experience at the end of life. Which of the following statements is most accurate about suffering?

Suffering is a physical concept primarily concerned with pain and its prompt and continuous relief.

Suffering involves the whole person and transcends the bio-psycho-social-spiritual dimension.

Suffering is relatively easily recognized and interpreted by loved ones who know the patient well.

Suffering can be diminished for the patient if the staff continues to focus on curing the disease.

Q6 Mr. F has advanced prostate cancer with bone metastesis. He is unresponsive, and is being cared for at home by his daughter. The home health nurse is teaching the daughter about assessing her father's pain. Which of the following statements by the daughter indicates understanding of her father's pain status?

"If he is not moaning, he's probably not experiencing pain."

"I'll have to guess when he is in pain since he can't tell me."

"Now that he's unable to communicate, we can stop his pain medication."

"Since he was in pain when he was conscious, I assume he's still in pain."

Q7 The nurse is talking with the parents of a 2-year-old boy diagnosed with leukemia about pain management. Which of the following statements by the nurse indicates understanding about pain management in children?

"He needs to be assessed carefully so that he gets enough pain medication."

"He may require less analgesia since he has limited memory of the pain."

"He is at risk for addiction due to his early exposure to pain medications."

"He doesn't have full pain sensitivity due to an underdeveloped nervous system."

Q8 The nurse has attended a staff development conference on end-of-life pain management for clients who are substance abusers. Which of the following statements by the nurse indicates a correct understanding of pain management for these clients with a history of substance abuse?

"They should not be given opioids for pain because of the high addiction risk."

"They will need smaller doses of analgesia to prevent cumulative overdose."

"They may require higher dose of opioids to relieve their pain."

"They need to withdraw from the substance prior to receiving analgesia."

Q9 The nurse's 68 year old patient is in the last hours of life after a lengthy illness. The patient has been receiving opioids for pain management. In assessing the patient as death approaches, the nurse knows that the opioid dose may need to be:

increased or decreased to maintain pain control

given only if requested by the patient

monitored as neuropathic pain increases as death approaches

discontinued due to diminished consciousness and altered mental state

Q10 The nurse is caring for Ms. P, a 55-year old woman with cancer. She received pain medication less than two hours ago after which she expressed significant relief. A colleague now reports that Mrs. P is complaining of pain. The colleague says "She can't be hurting as much as she says she is." What is the nurse's most appropriate response?

"Pain is whatever she says it is. Let's assess her further."

"We need to explore the cultural meaning pain has for her."

"I will tell her gently that she must wait four hours between doses."

"I'll wait to give the next dose and re-assess her a little early, in an hour."

Q11 The nurse is caring for the following four clients. Which of the following clients is at the highest risk for developing constipation?

A 48-year-old with metastatic cancer of the spine on high doses of opioids and has dehydration.

A 76-year-old with cancer of the bowel who has begun treatment for Clostridium difficile.

A 85-year old with hepatic encephalopathy who is receiving prescribed neomycin (Mycifradin) and lactulose.

A 90-year-old with uterine cancer and laboratory evidence of hypocalcemia and hyperkalemia.

Q12 The nurse is developing a plan of care for a client with terminal cancer who has a prescribed fentanyl (Duragesic) patch has started to take Dilaudid as a PRN medication. Which of the following goals would be essential to include in the client's plan of care?

Client will remain continent of urine and stool.

Client will have usual bowel pattern.

Client will not report dyspnea.

Client will not report fatigue.

Q13 The nurse is caring for a client who is in advanced stages of AIDS. The client is reporting fatigue. Which of the following assessment findings is commonly associated with the symptom of fatigue?

anorexia /cachexia

reduced serum calcium

hyperthyroidism

increased hemoglobin/hematocrit

Q14 The home health nurse is caring for a client at the end of life who has a recent history of constipation. The nurse should assess the client for which of the following indicators of fecal impaction?

foul smelling diarrhea

sudden onset of liquid stool

fatty looking stools

blood and mucous strands in stool

Q15 The nurse has been assigned to care for a woman who was recently admitted for advanced cancer, and who reports ongoing fatigue. Her husband offers observations about his wife's fatigue. Which of the following statements by the husband indicates the most correct understanding of his wife's fatigue?

"She sleeps quite a bit, so she shouldn't be as tired as she is."

"She's lost some weight. I know she'll feel better if she eats more."

"She's been in pain. If we control that maybe she'll have more energy."

"She seems moody, so we need to cheer her up and make her laugh."

Q16 An 84-year-old widow with diabetes and end-stage renal disease has been sent to the hospital from a nursing home. She has gangrene of the left foot with multiple, open infected wounds. Surgery is recommended, but the client does not want any invasive procedures. She wants to go back to the nursing home. She is alert, oriented, and has good decision-making capacity. Her children are emotionally distraught and pull the nurse aside to say, "We want the surgery. We want to do everything that can be done." What should the nurse do first?

Ensure the client and family understand the treatment options and risks.

Ask the hospital ethics committee to consider this case as soon as possible.

Offer to discuss the children's preferences with the physicians.

Encourage the children to talk their mother into having the surgery.

Q17 The hospice nurse is caring for a dying patient whose family disagrees with the patient's decisions about end-of-life care. Which of the following actions should the nurse take first?

Present the case to the agency's ethics committee for a resolution.

Ask the healthcare team to make decisions regarding end-of-life care.2

Initiate a referral to social services and request a home visit.

Encourage the family and client to discuss the conflict.

Q18 Ethical issues abound in palliative care. Which of the following statements most accurately describes the nurse's role in role in addressing ethical issues in palliative care?

Consider patient decisions according to the nurse's own values and beliefs.

Help the patient/family understand all options and their consequences.

Refer patient care ethical issues to ethics experts within the health care system.

Determine when patients are no longer competent to make their own decisions.

Q19 The nurse can contribute to ethical practice in end-of-life care by doing all of the following except:

Working closely with physicians to meet the needs of patients and their families.

Ensuring that patients/families are aware of treatment options and consequences of those options.

Participate in creating systems of care that specifically meet end-of-life needs for patients and families.

Using personal values and morals to determine best courses of actions for patients and families.

Q20 The nurse is caring for a man hospitalized with advanced metastatic disease. He has declined further treatment, and he is aware that his disease may progress more rapidly. The patient is considered to have good decision-making capacity. Who should make the decision to terminate treatment for this patient, and what ethical principle is applicable?

The patient refuses treatment for himself according to the right to self-determination.

The physician decides to withdraw treatment based on the principle of medical futility.

The family declines further treatment, exerting their option to claim surrogacy or proxy.

The executive board determines the patient's competence and applies hospital policies.

Q21 The nurse is caring for a client from Cambodia who has terminal lung cancer. The client is reluctant to discuss the illness. Which of the following actions should the nurse take?

Remind the client that it is important to talk about the illness.

Allow the client to remain in denial by not discussing the cancer.

Ask the family about their beliefs regarding full disclosure.

Refer the client to a mental health professional for evaluation.

Q22 The nurse is teaching a nursing student how to perform a cultural assessment for patients at the end of life. Which of the following statements indicates a correct understanding by the student?

"The best strategy for evaluating sexual orientation is to ask clients if they are heterosexual or homosexual."

"To assess spirituality, questions regarding religious affiliation and religious practices are generally sufficient."

"Financial status is an invasive question and should be asked by the social worker."

"Ethnic identity varies within ethnic groups, so ask clients how strongly they identify with a particular group."

Q23 The nurse is orienting to palliative care, and is identifying necessary learning activities. In order to provide culturally sensitive care to those at the end of life, one of the nurse's earliest orientation tasks should be to:

evaluate the cultural beliefs of co-workers

identify one's own cultural background and values

learn to predict how various races deal with end-of-life issues

become informed about state laws concerning end-of-life care

Q24 In palliative care, the nurse cares for people of many cultures. When conversing with persons of another culture, the nurse should:

use the patient's first name to establish warm rapport

determine who makes decisions for the patient and family

speak primarily to the translator rather than the patient or family

act as if the patient is fully informed of the diagnosis and prognosis

Q25 The nurse is part of a collaborative team providing end-of-life care. Which remark by another team member indicates the best understanding of culturally sensitive end-of-life care?

"I ask the patient who he wants to include in conversations about his illness."

"I hold the patient's hand and get physically close to her to show I care."

"I can predict how members of a particular ethnic group will respond to pain."

"I feel it's our obligation to tell a patient bad news, even if the family objects."

Q26 Nurses are concerned with religion and spirituality of patients in palliative care. Which of the following questions is the LEAST appropriate during a spiritual assessment?

"What church do you attend?"

"Are spiritual beliefs important in your life?"

"What aspect of your faith gives your life most meaning?"

How would you like me to address spirituality in your care?"

Q27 The nurse is being oriented to palliative care. Which of the following factors should the nurse identify as a crucial requirement to quality end-of-life care?

maintaining cost-effective analgesic regimens

restricting care to symptom management algorithms

communicating effectively with clients and families

employing volunteers to ensure clients are not alone

Q28 The nurse is preparing a staff development conference on adaptive and maladaptive mechanisms clients and families use when dealing with the diagnosis of a life-threatening illness. Which of the following should the nurse use as an example of an adaptive behavior?

use of humor as a means to reduce stress

expressions of guilt by either patient or family

a patient or family member exhibiting depression

use of denial over a prolonged period of time

Q29 The nurse is caring for a man with advanced prostate cancer. He has been told that his therapy is not working. He asks the nurse, "Why is this happening to me?" What is the nurse's most appropriate response?

"I don't know. I wish I had an answer for you, but I don't."

"Perhaps you're being tested and this will make you a stronger person."

"I'll ask the doctor to more fully explain the disease process."

"If I were you, I'd explore additional therapies and treatment options."

Q30 The nurse is facilitating a staff discussion about myths and realities of communication in palliative care. Which of the following is a correct statement about communication?

We can never give someone too much information.

We communicate only when we choose to communicate.

The majority of messages we send are non-verbal.

Communication is primarily words and their meanings.

Q31 Clients and families facing life-threatening illness expect that communication between themselves and a health care professional will include all of the following except:

the professional will be honest/truthful in all communications
the professional will discuss the client's care with the health care team
the professional will decide what client issues need to be addressed first
the professional will be available to listen to a client's concerns

Q32 An 85-year-old client with end-stage heart disease arrives unconscious at the emergency department after sustaining her third myocardial infarction. The physician has told the daughter that without resuscitation, her mother could die today. The nurse finds the daughter crying by the client's bedside. Which of the following interventions by the nurse is most appropriate in communicating with this family member?

ask the daughter if she would like to reconsider treatment
talk to the physician about moving the client to a unit with more privacy
remain present with the daughter, using silence to impart comfort
assure the daughter that she doesn't need to stay with her mother

Q33 The hospice nurse is caring for the family of a man who died several days ago after a long illness. His wife is concerned that their 9 year old son has become withdrawn and is easily angered. Which of the following actions is most appropriate for the nurse?

Recommend the boy be referred to a specialist for complicated grief reaction.
Suggest to the mother that the boy be excused from his usual activities.
Give permission and opportunities for the boy to express feelings of loss.
Provide information about death to the boy by telling stories rather than giving facts.

Q34 The new nurse is caring for a number of patients and family members who are facing loss or death. In speaking with them about grief, the nurse correctly conveys that grief:

is an orderly process with predictable stages of work to be done
begins before a loss or death, as people consider a pending loss
lasts a year or less, at which time survivors should be able to move on
includes personal feelings that are universal and understood by everyone

Q35 The nurse is talking with colleagues about the emotional challenges of working with dying patients and their families. The nurse identifies all of the following as appropriate responses to staff grief except:

helping plan a unit ceremony to honor all patients who have died recently.

seeking the support of a trusted colleague who has had similar experiences.

recognizing that personal grief should not be expressed by the nurse.

consulting with a pastoral care worker or spiritual advisor for assistance.

Q36 The nurse is caring for a 55-year-old female client with metastatic breast cancer. During a home visit, the nurse finds the client's 22-year-old daughter weeping at the kitchen table. The daughter explains that she just realized that her mother will not be alive when she gets married or has children of her own. Recognizing anticipatory grief in the young woman, the best nursing intervention is:

educate about signs and symptoms of disease progression

foster hope by stressing that prognosis is difficult to predict

provide therapeutic presence and practice active listening

advise the daughter to focus more on the present than the future

Q37 The wife of a recently deceased patients states: "Last night I though I heard him say
'Good night, Honey' just like he always did. Do you think I am going crazy?" The most helpful response by the nurse will be:

"You might want some extra support accepting your husband's death. I'll have the doctor make a referral to a psychologist."

"Many persons have similar experiences of seeing or hearing the one who has died. You must miss him saying 'good night'."

"Many persons believe in ghosts or spirits who visit their loved ones. Do you believe in ghosts or spirits?"

"That must be frightening for you. Do you have a friend or relative who can stay with you so that you are not alone?"

Q38 The nurse is orienting new staff to a clinical unit that provides palliative care. A new employee asks what "grief" is exactly. The nurse correctly defines grief as:

the emotional response to a loss

the outward, social expression of a loss

the depression felt after a loss

the loss of a possession or loved one

Q39 The emergency department nurse is speaking with the sister of a male client who died after suffering fatal injuries in a car accident. In order to plan for bereavement follow-up for the client's family, it is important that the nurse assess all of the following except:

family support systems
spiritual belief systems
concurrent stressors
advanced directives

Q40 The nurse is caring for a man who is imminently dying. During morning care, the man asks the nurse if he is dying. An example of the best response for the nurse to give is:

"Yes. I suppose you've known this all along. I promise I'll be right with you all the way."
"Not today. Why don't we look at some of the things you would like to accomplish now?"
"Yes. Tell me about any concerns, fears, or questions you have about what will happen."
"Why do you ask that? You look like you feel so much better today than you did yesterday!"

Q41 The nurse has been caring for a Latino client with advanced obstructive lung disease for the past several weeks. The client's family has been at the bedside daily, with one member spending the night throughout the client's hospital stay. In assessing cultural beliefs and practices related to death and dying for the client and family, it is necessary that the nurse should take into consideration all of the following factors except:

how long the client has been in this country
the age of the client and family members
aspects of spirituality, traditions, rites and rituals
specific beliefs about pain, suffering and death

Q42 The nurse is caring for a patient who has just died. In caring for the body after death, the goal of care is to:

make sure the body is sent to the morgue within an hour after death
have the family members participate in the bathing and dressing the deceased
notify all family members and team members regarding the patient's death

provide a clean, peaceful impression of the deceased for the family

Q43 The parents of a terminally ill 7 month old child are at the bedside when the child dies. The nurse supports the family's initial grief reactions by initiating all of the following interventions except:

encourage the parents to hold the child
support inclusion of siblings in death rituals
wrap the child securely in a blanket
avoid remarks regarding the child's life

Q44 The nurse may experience feelings of anxiety and grief when caring for clients and families facing death and the dying process. In order for the nurse to be able to continue to provide quality care, it is important to obtain personal support by:

seeking out the assistance of team members whenever necessary
periodic transfer to another unit to avoid caring for dying patients
maintaining an emotional distance from clients and families
scheduling counseling at regular intervals to deal with loss issues

Q45 In order to improve the quality of end-of-life care in the clinical environment, the nurse should do all of the following except:

strive to make transfers of clients less frequent and less disruptive
create standardized protocols and measures for this population
ensure continuity of care across time and provider settings
delay referral to hospice to maintain the patient's primary care

Q46 The nurse is caring for a terminally ill client who wishes to be discharged so that he can die at home. When planning for the discharge of this client with the interdisciplinary team, it is important to consider costs of care. The nurse understands that for a family caring for a dying patient at home:

costs of care can exhaust a family's financial resources
Medicare will cover all the older client's medical expenses
services are readily available to allow the client to stay at home
Medicaid will be the primary provider of services

Q47 The nurse who wants to make changes in the health care system in end of life care realizes that it is important to:

become knowledgeable with system shortcomings in order to develop commitment to change

concentrate on care that focuses on life-prolonging therapies rather than those that shorten life expectancy

ask management to identify the primary aim of end-of-life care for the patient care team to implement

realize that efforts towards system change are not in the scope of nursing practice

Q48 Change in the health care system begins on the clinical unit. In order to improve end-of- life care within an agency, the nurse should do all of the following except:

develop outcome measures for improved end-of-life care against which to measure progress

ask physicians, as health team leaders, to direct the end-of-life care team and make system improvements

be conscious of end-of-life care financial costs and treatment burdens on patients and families

focus on quality end-of-life care so that death is a positive outcome rather than a treatment failure

Q49 As a way of improving end-of-life care, Americans for Better Care of the Dying suggests making "seven promises" to those needing end-of-life care. These promises include all of the following except:

Health professionals will determine care priorities, sparing the patient and family from care decisions.

The health care team will do all they can to make sure the patient and family

The patient and family will be prepared for everything that is likely to happen in the course of the illness.

Patient and family wishes concerning care will be sought and respected, and followed whenever possible.

Q50 An effective way to accelerate improvement of end-of-life care services is by utilizing rapid cycle quality improvement. The fundamental questions that need to be addressed include all of the following except:

What are we trying to accomplish?

How will we know that a change is an improvement?

How many changes can we implement in the first year?

What changes can we make that will result in improvement?

Appendix K

Concerns About Dying (Mazor, Schwartz, & Rogers, 2004)

Please indicate the extent to which you agree or disagree with the following.

Q1 I sometimes worry that I will die young.
Disagree Completely Disagree Somewhat Neutral Agree Somewhat Agree Completely

Q2 I believe that my soul or spirit will continue after death.
Disagree Completely Disagree Somewhat Neutral Agree Somewhat Agree Completely

Q3 I get anxious or uncomfortable when I think about someone I care about dying.
Disagree Completely Disagree Somewhat Neutral Agree Somewhat Agree Completely

Q4 My religious and/or spiritual beliefs and practices help me think about death.
Disagree Completely Disagree Somewhat Neutral Agree Somewhat Agree Completely

Q5 I'm worried that my own death may be painful.
Disagree Completely Disagree Somewhat Neutral Agree Somewhat Agree Completely

Q6 I think that when it's time for me to die, I will be able to "let go."
Disagree Completely Disagree Somewhat Neutral Agree Somewhat Agree Completely

Q7 I am worried about how I will react emotionally to dying patients.
Disagree Completely Disagree Somewhat Neutral Agree Somewhat Agree Completely

Q8 I think that I will feel powerless with dying.
Disagree Completely Disagree Somewhat Neutral Agree Somewhat Agree Completely

Q9 I think I will find it hard to work with dying patients.
Disagree Completely Disagree Somewhat Neutral Agree Somewhat Agree Completely

Q10 I get anxious or uncomfortable when I think about my own death.
Disagree Completely Disagree Somewhat Neutral Agree Somewhat Agree Completely

Appendix L

Frommelt Attitudes Toward Care of the Dying (Frommelt, 1991)

In these items the purpose is to learn how nurses feel about certain situations in which they are involved with patients. All statements concern the giving of nursing care to the dying person and/or, his/her family. Where there is reference to a dying patient, assume it to refer to a person who is considered to be terminally ill and to have six months or less to live. Please select the answer following each statement which corresponds to your own personal feelings about the attitude or situation presented. Please respond to all 30 statements on the scale.

Giving nursing care to the dying person is a worthwhile learning experience.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Death is not the worst thing that can happen to a person.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

I would be uncomfortable talking about impending death with the dying person.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Nursing care for the patient's family should continue throughout the period of grief and bereavement.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

I would not want to be assigned to care for a dying person.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

The nurse should not be the one to talk about death with the dying person.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

The length of time required to give nursing care to a dying person would frustrate me.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

I would be upset when the dying person I was caring for gave up hope of getting better.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

It is difficult to form a close relationship with the family of a dying person.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

There are times when death is welcomed by the dying person.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

When a patient asks, "Nurse am I dying?", I think it is best to change the subject to something cheerful.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

The family should be involved in the physical care of the dying person.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

I would hope the person I'm caring for dies when I am not present.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

I am afraid to become friends with a dying person.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

I would feel like running away when the person actually died.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Families need emotional support to accept the behavior changes of the dying person.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

As a patient nears death, the nurse should withdraw from his/her involvement with the patient.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Families should be concerned about helping their dying member make the best of his/her remaining life.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

The dying person should not be allowed to make decisions about his/her physical care.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Families should maintain as normal an environment as possible for their dying member.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

It is beneficial for the dying person to verbalize his/or feelings.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Nursing care should extend to the family of the dying person.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Nurses should permit dying persons to have flexible visiting schedules.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

The dying person and his/her family should be the in-charge decision makers.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Addiction to pain relieving medication should not be a nursing concern when dealing with a dying person.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

I would be uncomfortable if I entered the room of a terminally ill person and found him/her crying.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Dying persons should be given honest answers about their condition.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Educating families about death and dying is not a nursing responsibility.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Family members who stay close to a dying person often interfere with the professionals' job with the patient.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

It is possible for nurses to help patients prepare for death.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Appendix M

Perceived Competence in Meeting ELNEC Standards (Pfitzinger Lippe & Becker, 2015)

Please select the answer following each statement which corresponds to your own personal feelings about your ability to meet the stated competency at this point in time. Please respond to all 15 competencies on the scale. Answering Strongly Disagree or Disagree indicates you feel you are not able to meet the competency. Answering Strongly Agree or Agree indicates you feel you are able to meet the competency.

Q1 Recognize dynamic changes in population demographics, health care economics, and service delivery that necessitate improved professional preparation for end-of-life care.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q2 Promote the provision of comfort care to the dying as an active, desirable, and important skill, and an integral component of nursing care.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q3 Communicate effectively and compassionately with the patient, family, and health care team members about end-of-life issues.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q4 Recognize one's own attitudes, feelings, values, and expectations about death and the individual, cultural, and spiritual diversity existing in these beliefs and customs.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q5 Demonstrate respect for the patient's views and wishes during end-of-life care.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q6 Collaborate with interdisciplinary team members while implementing the nursing role in end-of-life care.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q7 Use scientifically based standardized tools to assess symptoms (e.g., pain, dyspnea [breathlessness] constipation, anxiety, fatigue, nausea/vomiting, and altered cognition) experienced by patients at the end of life
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q8 Use data from symptom assessment to plan and intervene in symptom management using state-of-the-art traditional and complementary approaches.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q9 Evaluate the impact of traditional, complementary, and technological therapies on patient- centered outcomes.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q10 Assess and treat multiple dimensions, including physical, psychological, social and spiritual needs, to improve quality at the end of life.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q11 Assist the patient, family, colleagues, and one's self to cope with suffering, grief, loss, and bereavement in end-of-life care.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q12 Apply legal and ethical principles in the analysis of complex issues in end-of-life care, recognizing the influence of personal values, professional codes, and patient preferences.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q13 Identify barriers and facilitators to patients' and caregivers' effective use of resources.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q14 Demonstrate skill at implementing a plan for improved end-of-life care within a dynamic and complex health care delivery system
Strongly Disagree Disagree Uncertain Agree Strongly Agree

Q15 Apply knowledge gained from palliative care research to end-of-life education and care.
Strongly Disagree Disagree Uncertain Agree Strongly Agree

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